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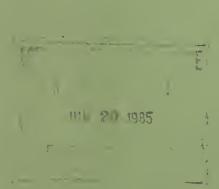
TDAM: Access in the Batch Mode

bу

Walter R. Houser

April 1979

Foreign Demand and Competition Division

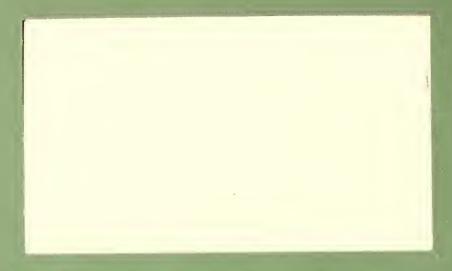


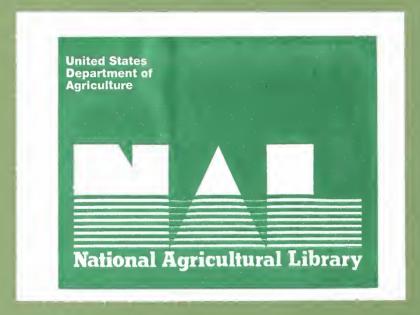


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An FDCD Working Paper

TDAM: Access in the Batch Mode

Ъу

Walter R. Houser

April 1979





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CATALOGING PREP



INTRODUCTION

The TDAM procedure will allow the user to create, update, list and delete documentation and data on the TDAM data base. These changes can be entered using this interactive procedure with the convenience of on line processing, but the actual transactions are made in the batch mode. Thus the expense of making real time changes is greatly reduced through the use of batch processing. Since most changes to TDAM do not require faster than overnight turn around, you can save about 40 percent in processing costs compared to DBUSER and TDAMUSER. Furthermore the TDAM procedure gives you more control over the creation and maintenance of TDAM documentation.

Assuming that you are READY mode under ERSPROC, the TDAM procedure is entered by typing TDAM. if you are not familiar with the various routines available, enter HELP when the procedure asks for the routine code. The routine QUIT will return you to READY mode in TSO.

The following JCL information is necessary for all of the TDAM routines:

- The batch jobname can be up to 8 characters of your choosing, but should conform to agency conventions. If you do not know your 10 digit account number, contact your ADP security officer.
- 2) The user is strongly encouraged to submit batch jobs with the lowest desired priority. Priority 1 is designated as weekend but usually will return by the next morning (but at one third the cost of priority 3).
- 3) When generating XEROX output (8 1/2 x 11 sheets), you should notify the remote terminal operator and complete the appropriate forms.
- 4) Only the most lengthy job will require a job class other than C.
- 5) If you are submitting more than one batch job, TDAM will remember this JCL information from the previous batch job. To repeat this information, send a carriage return when prompted for an entry.

This procedure draws heavily upon software written by Robert L. Otto and other ESCS/Data Services Center (DSC) staff. Their assistance and encouragement were instrumental in the prepartion of this paper, but its imperfections remain the responsibility of the author.



SUMMARY OF TDAM ROUTINES

Routine Name	Description
CHGDOC	will update the documentation for a TDAM variable (asuming your TDAM sign-in is valid).
COPY	will copy the contents of one TDAM variable (assuming your TDAM sign-in is valid). The new variable will not be created if there is one already by that name and logical group and frequency (unless you tell it to do so).
CREATE	will create a new TDAM variable with the documentation you provide it (assuming your TDAM sign-in is valid).
DELETE	will remove the specified variable from TDAM (assuming your TDAM sign-in is valid). DEL is an alias.
DIR	will print a directory listing of the variables for the designated logical group and frequency.
LIST	will list the data and documentation for a specified TDAM logical group or individual variables. TAB is an alias.
POSTDATA	will update data in existing TDAM variables (assuming your TDAM sign-in is valid). You may change data only within the variable's initial (IP) and last period (LP). TDATA is an alias.
SPKBATCH	will allow creation and/or modification of SPEAKEZ commands and then submit

alias.

them for batch execution. SKPB is an



CHGDOC

DESCRIPTION:

The CHGDOC routine will submit a batch job to change the documentation on an existing TDAM variable. Your sign in and password must be the correct one for this logical group (even though the program will not check this until batch execution). Contact ESCS/DSC at x72623 if you have questions about your TDAM password.

The following fields may be changed:

Field	Number of Characters	Туре
Variable Name	2-20	Alpha-numeric
Logical Group and Frequency	4	Alpha
Starting Date/ Initial Period or IP	7	Numeric
Ending Date/ Last Period or LP	7	***
Decimal places	1-2	11
Unit of Measure	2-16	Alpha-numeric
Owner's Name (set up by)	2-16	11
Description	2-79	tt
Source	2-79	**

The frequency of the data cannot be altered. The starting ending periods are used only when creating a variable, which will be initialized with data at -999999. If you wish to alter the starting or ending period, see the TDAMUSER program in SPEAKEZ or contact ESCS/DSC.

The routine will prompt the user for each field in turn. If the field is to remain unchanged from what is already in TDAM, enter KEEP or K . If the field is to be exactly like that for the variable you just updated then enter DITTO or D. Sending a carriage return is the same as entering DITTO (not KEEP); a carriage return will update the variable with the current contents of the documentation field.



For example, if you were updating an existing variable and entered KEEP for all but the Description and Source fields, all but those two would be unchanged.

If you entered DITTO for Source then the source information from the immediately preceding variable would be inserted. (Even if you made no change to that preceding variable; it would use that source documentation regardless).

Suppose that you did not want to use that source but wanted to enter new information. When the routine lists the new documentation, you will quickly see that the source information given is incorrect (i.e. left over from the previous variable). When the routine asks IS THIS CORRECT? say NO and re-enter the documentation. In this case send carriage returns until it asks for SOURCE and then enter your source documentation. Please see the attached example.

Once you are satisfied with the documentation, the routine will delete the existing variable (if there is one) and add the new documentation. Existing data, if any, will not be changed (See POSTDATA for that). During this same batch job, you may CHGDOC, COPY, CREATE or DELETE any variables in any logical group for which your TDAM sign in (as entered above) is valid.

This routine submits a batch DAMEASY job. For details see the TDAM System Documentation Version 3.00 page 61; its not necessary to know anything about SPEAKEZ or DAMEASY to use this or any TDAM routine.



```
ENTER THE ROUTINE CODE (OR QUIT OR HELP)
CHGCGC
EMBLOC
THIS ROUTINE IS FOR BATCH UPDATES OF TOAM DOCUMENTATION.
IF THE DOCUMENTATION FIELD IS NOT TO BE CHANGED, THEN
ENTER KEEP OR K. IF THE ENTRY FOR THE FIELD IS TO BE THE
SAME AS THAT FOR THE PREVIOUS UPDATED VARIABLE, THEN
ENTER DITTO OR D OR A CARRIAGE PETURN.
ENTER THE LOBNAME
ERSJUH
ENTER YOUR 10 DIGIT ACCOUNT NUMBER 0123456789
ENTER THE NUMBER OF COPIES DESIRED
ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
RMT13
IS THE OUTPUT TO BE ON MERCK? (Y OR N)
WHAT IS YOUR PRIORITY?
 IL FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
WHAT IS THE JOB CLASS? (USUALLY C)
      LIOBNAME=ERSSNH ACCOUNT=0123456789
                                                                                         COPIES=1
    ROUTE=RMT13 FORM=1431 FRIORITY=3 CLASS=C
IS THIS CORRECT? (Y OR N)
ENTER YOUR TIAM SIGH-IN NAME AND PASSWORD (ER9XX PASS)
ERGUH pass
ENTER YOUR LOGICAL GROUP AND FREQUENCY
ENTER THE VARIABLE NAME
ENTER THE DECIMAL PLACES
ENTER THE UNIT OF MEASURE
  $ 000 HEETBRES
ENTER THE CHINER'S NAME
ENTER THE DESCRIPTION
  BRALEY AREA PLANTED AUSTRALIA CADA####APA-MAR CROP YEAR USUALLY SOWN MAY-JUN
ENTER THE DATA SOURCE
1) RES, CROP STRT: TREU 5-6 2) RES; ANNUAL REPT; SCEDULE A 3) FRS 3 AND D: MRKT YR######
THE NEW DOCUMENTATION IS AS FOLLOWS:
    LOGICAL GROUP AND FREQUENCY IS ... ALAA
VARIABLE NAME IS ... AB
     DECIMAL PLACES ARE ... 3
UNIT OF MEASURE IS ... 1,000 HECTARES
OWNER'S MANE IS ... KEEP
     DESCRIPTION IS ... BARLEY, AREA PLANTED, AUSTRALIA, APR-MAR CROP YEAR, USUALLY SOM
MUL-YAM M
DATA SOURCE IS ... 1)ABS,CROP STAT,TABL 5-6 2)ABB,ANNUAL REPT,SCEDULE A 3)FAS S AND D,DEC-MOV MPKT YR
       SOURCE (82 CHARS) IS TOO LONG.
 IS THIS CORRECT? (Y OR N)
ENTER YOUR LOGICAL GROUP AND FREQUENCY
ENTER THE VARIABLE NAME
 OF THE
ENTER THE DECIMAL PLACES
ENTER THE UNIT OF MEASURE
ENTER THE OWNER'S NAME
ENTER THE DESCRIPTION
ENTER THE DATA SCURCE

Directory of the control of 
 THE NEW DOCUMENTATION IS AS FOLLOWS:
    HE NEW DOCUMENTATION IS HS FULLOWS:
LOGICAL GROUP AND FREQUENCY IS ... ALAA
UMRIABLE NAME IS ... AB
DECIMAL PLACES ARE ... 3
UNIT OF MEASURE IS ... 1,000 HECTARES
OWNER'S MANE IS ... PEEP
DESCRIPTION IS ... PARLEY, AREA FLANTED, AUSTRALIA, APR-MAR CROP YEAR, USUALLY SOW
N MAY-JUN
DATA SOURCE IS ... 1)ABS,CROP STAT,TABL 5,6 2)ABB,ANNUAL PEPT,SCHEDULE A 3)FAS
S+D,DEC-HOU MRKT YP
 IS THIS COFFECT? (Y OR N)
ENTER FOUTINE CODE (CHGDOC.COPY.CFEATE.DEL) OR STOP
IF THEFE AFE NO MORE VARIABLES TO BE CHANGED.
```

JOB EPSSMH(JOBO2867) SUBMITTED . FFEE ALL FILES ..



DESCRIPTION:

The COPY Routine will copy the documentation and data of one TDAM variable from one logical group and variable name to another. Your TDAM sign-in and password must be the correct one for the new logical group (even though the program will not check this until batch execution). Contact ESCS/DSC at x72623 if you have questions about your TDAM password.

The routine will ask if the new variable already exists. If yes, then it will be deleted and replaced with the data and documentation of the old. However before then, you may make whatever changes to the documentation (only) just as you would for CHGDOC. If you wish, you may change the new variable's data later using POSTDATA. You may not change the initial or last period of the variable. (To do this, please see the TDAMUSER program in SPEAKEZ or contact ESCS/DSC.)



```
ENTER THE ROUTINE CODE (OR QUIT OR HELP)
MPY
THIS ROUTINE IS FOR BATCH COPYING OF TIAM VARIABLES.
  THE DOCUMENTATION FIELD IS NOT TO BE CHANGED, THEN
ENTER KEEP OR K. IF THE ENTRY FOR THE FIELD IS TO BE THE SAME AS THAT FOR THE PREVIOUS UPDATED VARIABLE, THEN
ENTER DITTO OR D OR A CARRIAGE RETURN.
ENTER THE JOENAME
ERS3⊍H
ENTER YOUR 10 DIGIT ACCOUNT NUMBER
0123456789
ENTER THE MUMBER OF COPIES DESIRED
ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
₽713
IS THE OUTPUT TO BE ON XEROX? (Y OR N)
WHAT IS YOUR PRIORITY?
 O FOR WEEKEND, 3 FOR HUERAGE, AND 13 FOR ASAP)
WHAT IS THE JOB CLASS? (USUALLY C)
                                          COPIES=1
   JOBNAME=ERSSWH ACCOUNT=0123456789
  ROUTE=RMT13 FORM=1431 FRIORITY=3 CLASS=C
 IS THIS CORRECT? (Y OR N)
 ENTER YOUR TOAM SIGN-IN NAME AND PASSWORD (ER9XX PASS)
 ERGUH pass
 ENTER YOUR OLD LOGICAL GROUP AND FREQUENCY
 ENTER THE OLD VARIABLE NAME
 WERR
 ENTER THE NEW LOGICAL GROUP AND FREQUENCY
 ENTER THE NEW VARIABLE NAME
 YERR
 DOES THE NEW VARIABLE EXIST? (Y OR N)
 ENTER THE DECIMAL PLACES
 ENTER THE UNIT OF MEASURE
  HEEP
  ENTER THE OWNER'S NAME
 ENTER THE DESCRIPTION
  ENTER THE DATA SOURCE
  EXAMPLE OF THE TORM ERTCH COPY ROLLTINE
  THE NEW DOCUMENTATION IS AS FOLLOWS:
    OLD LOGICAL GROUP AND FREQUENCY IS ... ALAA
    OLD VARIABLE NAME IS ... YEAR
NEW LOGICAL GROUP AND FREQUENCY IS ... JPNA
    NEW CARLABLE NAME IS ... YEAR
    DECIMAL PLACES ARE ... 0
UNIT OF MEASURE IS ... KEEP
    OWNER'S MAME IS ... KEEP
    DESCRIPTION IS ... KEEP
    DATA SOURCE IS ... EXAMPLE OF THE TOAM BATCH COPY ROUTINE
  IS THIS CORRECT? (Y OR N)
  ENTER ROUTINE CODE (CHGDOC, COPY, CREATE, DEL) OR STOP
   IF THERE ARE NO MORE WAR LABLES TO BE CHANGED.
   JOB ERSSWH(JOB02882) SUBMITTED ** FREE ALL FILES
```



CREATE

DESCRIPTION:

The CREATE routine will create a new TDAM variable with the documentation you provide. Your TDAM sign-in and pasword must be correct for the logical group (even though the program will not check this until batch execution). Contact ESCS/DSC at x72623 if you have questions about your TDAM password. See the CHGDOC command for a discussion of the TDAM documentation fields and the use of DITTO. Since the variable is new, there is nothing to KEEP so you should not use this option.



Example of CREATE

```
ENTER THE ROUTINE CODE (OR QUIT OR HELP)
THIS ROUTINE IS FOR CPEATING NEW TOAM WARIABLES.
IF THE DOCUMENTATION IS TO BE THE SAME AS THAT FOR THE FREVIOUS UPDATED WAPIABLE, ENTER DITTO OR D OR A CARRIAGE
           (YOU SHOULD NOT USE THE KEEP OR K OPTION.)
RETURN.
ENTER THE JUENAME
ERSJUHA
ENTER YOUR 10 DIGIT ACCOUNT NUMBER 0123456789
ENTER THE NUMBER OF COPIES DESIRED
ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
FMT13
IS THE OUTPUT TO BE ON XEROX? (Y OR NO
WHAT IS YOUR PRIORITY?
(1 FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
WHAT IS THE JOB CLASS? (USUALLY C)
   JOBNAME=ERSSNHA ACCOUNT=0123456789
                                               CORTES=1
  ROUTE=MT13 FORM=1431 PRIORITY=3 CLASS=C
IS THIS CORRECT? (Y OR N)
PLEASE TRY AGAIN
ENTER THE JOENAME
ENTER YOUR 10 DIGIT ACCOUNT NUMBER
ENTER THE NUMBER OF COPIES DESIRED
ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
IS THE OUTPUT TO BE ON MEROX? (Y OR N)
WHAT IS YOUR PRIORITY?
OL FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
WHAT IS THE JOB CLASS? (USUALLY C)
   JOBNAME=ERSSWHA ACCOUNT=0123456789
                                                COPIES=1
  ROUTE=RMT13 FORM=1431 FRIORITY=3 CLASS=C
IS THIS CORRECT? (Y OR N)
ENTER YOUR TOAM SIGN-IN NAME AND PASSWORD (ER9XX PASS)
ERGUH pass
ENTER YOUR LOGICAL GROUP AND FREQUENCY
ENTER THE VARIABLE NAME
TEST-DATE
ENTER THE INITIAL PERIOD (E.G. 1960001)
1955001
ENTER THE LAST PERIOD (E.G. 1979011)
1973001
ENTER THE DECIMAL PLACES
ENTER THE UNIT OF MEASURE
METRIC TONS
ENTER THE CHINER'S NAME
HOUSER FOCD/OCPE
ENTER THE DESCRIPTION
THIS IS A VARABLE! THIS IS A VARIABLE CREATED BY TORM BRITCH PROCEDURE ENTER THE DATA SOURCE
AS A TEST OF THE CREATE ROUTINE
THE NEW DOCUMENTATION IS AS FOLLOWS:
  LOGICAL GROUP AND FREQUENCY IS ... EECA

UMRIABLE NAME IS ... TEST-DATA

DECIMAL PLACES ARE ... 2

UNIT OF MEASURE IS ... METPIC TONS

OWNER'S NAME IS ... HOUSER FICE/DCPA

DESCRIPTION IS ... THIS IS A VARIABLE CREATED BY TIAM BATCH PROCEDURE

DATA SOURCE IS ... AS A TEST OF THE CREATE ROUTINE
   THIS IS A NEW WARIABLE WITH DATA INITIALIZED AT -999999.
     INITIAL PERIOD IS ... 1955001
LAST PERIOD IS ... 1979001
IS THIS CORRECT? (Y OR N)
ENTER POUTINE CODE (CHGDOC,COPY,CREATE,DEL) OR 'STOP' IF THERE ARE NO MORE VARIABLES TO BE CHANGED.
```

JOB ERSSWHA (JOBO2899) SUBMITTED ** FFEE ALL FILES **



DELETE

DESCRIPTION:

The DELETE routine will remove the requested TDAM variable from the indicated logical group and frequency. Your TDAM sign-in and password must be the correct one for the logical groups of the variables you are deleting (even though the program will not check this until batch execution). Contact ESCS/DSC at x72623 if you have questions about your TDAM password.

Suggestion: You should do your DELETES along with your CHGDOC, COPY, and CREATE commands. It is more efficient since they will be put into one batch job instead of separate batch jobs.



WELCOME TO TOAM IN THE BATCH MODE.

```
ENTER THE ROUTINE CODE (OR QUIT OR HELP)
 THIS ROUTINE IS FOR BATCH DELETION OF TDAM VARIABLES.
 ENTER THE JOBNAME
 ERS3WHD
 ENTER YOUR 10 DIGIT ACCOUNT NUMBER
 0123456789
 ENTER THE NUMBER OF COPIES DESIRED
 ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
 ₽713
 IS THE OUTPUT TO BE ON MEROX? (Y OR N)
 WHAT IS YOUR PRIORITY?
  d FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
 WHAT IS THE JOB CLASS? (USUALLY C)
    JOBNAME=ERSSWHD ACCOUNT= 0123456789
                                         COPIES=1
   ROUTE=RMT13 FORM=1431 FRIORITY=3 CLASS=C
 IS THIS CORRECT? (Y OR N)
 ENTER YOUR TOAM SIGN-IN NAME AND PASSWORD (ER9XX PASS)
 ERSUH PASS
- ENTER YOUR LOGICAL GROUP AND FREQUENCY
 SE CH
 ENTER THE VARIABLE NAME
  EST-OATH
 THE VARIABLE TO BE DELETED IS: TEST-DATA
 THE LOGICAL GROUP AND FREQUENCY IS: EECA
 IS THIS CORRECT? (Y OR N)
 ENTER ROUTINE CODE (CHGDOC, COPY, CREATE, DEL) OR STOP
 IF THERE ARE NO MORE VARIABLES TO BE CHANGED.
 DEL
 ENTER YOUR LOGICAL GROUP AND FREQUENCY
 ENTER THE VARIABLE NAME
  TESTEG
 THE VARIABLE TO BE DELETED IS: TESTBG
 THE LOGICAL GROUP AND FREQUENCY IS: UPMA
 IS THIS CORRECT? (Y OR N)
 ENTER ROUTINE CODE (CHGDOC, COPY, CREATE, DEL) OR STOP
  IF THERE ARE NO MORE VARIABLES TO BE CHANGED.
 STOP
 UOB ERS3WHD(JOB03339) SUBMITTED 🤲 FREE ALL FILES 💥
```



DESCRIPTION:

The DIR routine will submit a batch job to print a TDAM directory listing of the variables in the designated logical group and frequency. You should be careful that any batch job changes to the requested variables should be completed before requesting a directory of the documentation. The DIR routine emulates the procedures TDAM3DIR and TDAM3DOC. Further details may be found in the TDAM System Documentation Version 3.00, p. 18.



```
ENTER THE ROUTINE CODE (OR QUIT OR HELP)
 OTR
 THIS ROUTINE PROVIDES A DIRECTORY OF TDAM DATA GROUPS.
 ENTER THE JOENAME
 ERSGUH
 ENTER YOUR 10 DIGIT ACCOUNT NUMBER
 0123456789
 ENTER THE NUMBER OF COPIES DESIRED
 ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
 Rm 13
 IS THE OUTPUT TO BE ON MERCK? (Y OR N)
 YOU MUST GIVE THE OPERATOR A REQUEST FORM FOR XEROX
 FROCESSING. PLEASE ALLOW 3 DAYS.
 WHAT IS YOUR PRIORITY?
 OL FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
 WHAT IS THE JOB CLASS? (USUALLY C)
   JOBNAME = ERSSWH ACCOUNT=0123456789
                                        COPIES=1
   ROUTE=RMT13 FORM=XERO PRIORITY=1
                                       CLASS=D
 IS THIS CORRECT? (Y OR N)
 ENTER THE LOGICAL GROUP FOR WHICH YOU WISH A DIRECTORY
 88
 IS ALA CORRECT? (Y OR N)
 DO YOU WANT A COMPLETE OR BRIEF LISTING OF THE DOCUMENTATION? (C OR B)
 JOB ERSSWH(JOB03350) SUBMITTED **
                                    FREE ALL FILES
- ENTER THE ROUTINE CODE (OR QUIT OR HELP)
 THIS ROUTINE PROVIDES A DIRECTORY OF TDAM DATA GROUPS.
 ENTER THE JOBNAME
 ENTER YOUR 10 DIGIT ACCOUNT NUMBER
 ENTER THE NUMBER OF COPIES DESIRED
 ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
 IS THE OUTPUT TO BE ON XEROX? (Y OR N)
 YOU MUST GIVE THE OPERATOR A REQUEST FORM FOR XEROX
 FROCESSING. PLEASE ALLOW 3 DAYS.
 WHAT IS YOUR PRIORITY?
 (L FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
 WHAT IS THE JOB CLASS? (USUALLY C)
   JOBNAME=ERS3WH ACCOUNT=0123456789
                                        COPIES=1
   ROUTE=RMT13 FORM=XERO PRIORITY=1
                                        CLASS=D
 IS THIS CORRECT? (Y OR N)
 ENTER THE LOGICAL GROUP FOR WHICH YOU WISH A DIRECTORY
 FLAR
 IS ALAA CORRECT? (Y OR N)
 DO YOU WANT A COMPLETE OR BRIEF LISTING OF THE DOCUMENTATION? (C OR B)
JOB ERSSWH (JOBØ3383) SUBMITTED
                                ** FREE ALL FILES
```



DESCRIPTION:

The LIST routine will submit a batch job to list the documentation and data for a designated logical group or specified variables from one or more logical groups. It is much less expensive to specify individual varables than to request an entire logical group. Also in the former case, you may specify your choice of print options (other than the default options of MISSING and ZEROES). When you have entered all the variables you wish to list, enter STOP or NOMO as the next logical group.

Suggestion: It is cheaper to group your list requests instead of doing them between POSTDATA or CHGDOC routines. You should be careful that the batch run containing any changes to the data or documentation of these variables should be successfully completed before listing them. The LIST routine executes TPTABULR. (Please see the TDAM System Documentation Version 3.00, p. 53 for details on these programs).

EXAMPLE:

ENTER THE ROUTINE CODE (OR QUIT OR HELP) THIS ROUTINE PROVIDES A TABULAR LISTING OF TDAM DATA INDIVIDUALLY OR BY LOGICAL GROUP. ENTER THE JOBNAME ERSSWHL ENTER YOUR 10 DIGIT ACCOUNT NUMBER 0123456789 ENTER THE NUMBER OF COPIES DESIRED ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS) RMT13 IS THE OUTPUT TO BE ON MERCK? (Y OR N) YOU MUST GIVE THE OPERATOR A REQUEST FORM FOR XEROX FROCESSING. PLEASE ALLOW 3 DAYS. WHAT IS YOUR PRIORITY? O FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP) WHAT IS THE JOB CLASS? (USUALLY C) JOBNAME=ERSSWHL ACCOUNT= 0123456789 COPIES=1 ROUTE=RMT13 FORM=XERO PRIORITY=1 CLASS=C IS THIS CORRECT? (Y OR N) DO YOU WISH TO LIST BY GROUP OR VARIABLE? (G OR V) ENTER YOUR LOGICAL GROUP AND FREQUENCY IS ALAA CORRECT? (Y OR N) JOB ERSSWHL(JOB03393) SUBMITTED *** FREE ALL FILES ***



Example of LIST

ENTER THE ROUTINE CODE (OR QUIT OR HELP) LIST THIS ROUTINE FROUIDES A TABULAR LISTING OF TDAM DATA INDIVIDUALLY OR BY LOGICAL GROUP. ENTER THE JOENAME ERSJUHL ENTER YOUR 10 DIGIT ACCOUNT NUMBER 0123456789 ENTER THE NUMBER OF COPIES DESIRED ENTER THE PEMOTE TERMINAL (RMT13 FOR @SCS OR RMT3 FOR FAS) IS THE OUTPUT TO BE ON XEROX? (Y OR N) WHAT IS YOUR PRIORITY? (L FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP) WHAT IS THE JOB CLASS? (USUALLY C) JOBNAME=ERSSWHL ACCOUNT=0123456789 COPIES=1 ROUTE=RMT13 FORM=1431 FRIORITY=3 CLASS=C IS THIS CORRECT? (Y OR N) DO YOU WISH TO LIST BY GROUP OR VARIABLE? (G OR V) DO YOU WANT THE USUAL PRINT OPTIONS (MISSING, ZEROES)? (Y OR N) ENTER STOP OR NOMO WHEN YOU ARE FINISHED. ENTER LOGICAL GROUP AND FREQUENCY (OR STOP). ENTER THE VARIABLE NAME IN ALAA THE VARIABLE NAME IS: AB THE LOGICAL GROUP AND FREQUENCY IS: ALAA IS THIS CORRECT? (Y OR N) ENTER LOGICAL GROUP AND FREQUENCY (OR STOP). ENTER THE VARIABLE NAME IN JPNA YEAR THE VARIABLE NAME IS: YEAR THE LOGICAL GROUP AND FREQUENCY IS: JPNA IS THIS CORRECT? (Y OR N) ENTER LOGICAL GROUP AND FREQUENCY (OR STOP). ENTER THE VARIABLE NAME IN JENA TEST-DATA THE VARIABLE NAME IS: TEST-DATA
THE LOGICAL GROUP AND FREQUENCY IS: JPNA IS THIS CORRECT? (Y OR N) PLEASE TRY AGAIN ENTER LOGICAL GROUP AND FREQUENCY (OR STOP). ENTER THE VARIABLE NAME IN EECA THE VARIABLE NAME IS: TEST-DATA
THE LOGICAL GROUP AND FREQUENCY IS: EECA IS THIS CORRECT? (Y OR N) ENTER LOGICAL GROUP AND FREQUENCY (OR STOP).

UOB ERSOWHL(UOE02934) SUBMITTED ** FREE ALL FILES **



POSTDATA

DESCRIPTION:

The POSTDATA routine is used to post or change data for any existing TDAM variable. Your TDAM sign-in and password must be the correct one for the logical groups for the variables you are updating (even though the program will not check this until batch execution). Contact ESCS/DSC at x72623 if you have questions about your TDAM password.

Enter the 7 digit initial period for the first data value to be changed. You may enter up to five data values for the five successive periods after this initial period. For annual data an initial period of 1969001 will update 1969001, 1970001, 1971001, etc. For monthly data beginning with 1969011, the values will change 1969011, 1969012, 1970001, 1970002, and 1970003. In lieu of a number, you may enter one of the following codes:

Code you Enter	Meaning	Value Entered into TDAM
REP	Repeat or re-enter the previous value	-none-
NOM	No more values for this variable	-none- go to next variable
MIS	Missing data	-999999
N/A	Data is not available	-999996
NEG	Data is negligible but not zero	-999997

If you are entering negative values, each value must be exactly nine characters long with the minus sign as the first character, followed by leading blanks or zeroes until the number is complete. You may enter REP as often as you need to get the value entered correctly.

The routine will ask you for the number of decimal places in your TDAM variable. This is done to help you to be clear on the decimal places in the number you are entering. The program does not convert decimal places; putting a decimal in the value will cause an error. For example, suppose your variable is the price of truffles in dollars with two decimal places (TDDECLOC=2). If the new value



is \$4.15, you enter '415' as the value and the routine will tell you that TDAM will know this to be '4.15', not 415.00. However you could have just as correctly said there were 0 decimal places (even though the TDAM variable has 2 decimal locations) and entered '415' without any decimals. But entering '415.0' would be invalid, and '41550' would be incorrect (since that would mean \$415.50 to TDAM). Please see the attached example.

After entering 5 values or NOM (or NOMORE), the routine will show you the updates you have generated, including the leading zeroes it adds to make each positive value nine characters long. If you don't like its looks, answer NO when the routine asks IS THIS CORRECT?

Suggestion: It is cheaper to do all your data posting at one time, instead of mixing documentation (CHGDOC or LIST) and data updates. The POSTDATA routine executes the DBCARDX program which is quick and inexpensive but entirely separate from SPEAKEZ. Switching from posting data to listing it or changing its docummentation will trigger seperate batch jobs for each switch. DBCARDX, the program used by this routine, is thoroughly described in the TDAM System Documentation Version 3.00 beginning on page 26.

(See example on the next page.)



Example of POSTDATA

```
ENTER THE ROUTINE CODE (OR QUIT OR HELP)
FOSTDATA
THIS ROUTINE IS FOR BATCH UPDATES OF TDAM DATA
ENTER THE JUBNAME
ERSÜMHP
ENTER YOUR 10 DIGIT ACCOUNT NUMBER
0123456789
ENTER THE MUMBER OF COPIES DESIRED
ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
FMT13
IS THE OUTPUT TO BE ON XEROX? (Y OR N)
WHAT IS YOUR PRIORITY?
(1 FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
3
WHAT IS THE JOB CLASS? (USUALLY C)
   JOBNAME=ERS3WHP ACCOUNT=0123456789
                                        COPIES=1
  ROUTE=RMT13 FORM⇒1431 FRIORITY=3 CLASS=C
IS THIS CORRECT? (Y OR N)
ENTER YOUR TOAM SIGN-IN NAME AND PASSWORD (ER9XX PASS)
ERGUH PASS
ENTER REPEAT OR REP TO RE-ENTER A VALUE
      NOMORE OR NOM TO STOP BEFORE 5 VALUES
      MISSING OR MIS FOR MISSING DATA (-999999)
      N/A FOR NOT AVAILABLE (-999996)
      NEG FOR NEGLIGIBLE (-999997)
ENTER STOP OR NOMO WHEN YOU HAVE UPDATED ALL YOUR VARIABLES.
ENTER YOUR LOGICAL GROUP AND FREQUENCY (OR STOP)
AL BB
 ENTER THE VARIABLE NAME IN ALAA
 YERE
 ENTER THE INITIAL PERIOD (E.G. 1955001)
 1976991
 ENTER THE DECIMAL FLACES
 YOU MAY ENTER UP TO 5 DATA VALUES BEGINNING WITH THAT FOR 1976001.
 ENTER VALUE FOR DATA FIELD 1
 76
 THIS VALUE WILL BE 76.
 ENTER VALUE FOR DATA FIELD 2
 77
 THIS VALUE WILL BE 77.
 ENTER VALUE FOR DATA FIELD 3
 THIS VALUE WILL BE 78.
 ENTER VALUE FOR DATA FIELD 4
  79
  THIS VALUE WILL BE 79.
  ENTER VALUE FOR DATA FIELD 5
  90
  THIS VALUE WILL BE 80.
  YOUR UPDATE OF YEAR IN ALAA BEGINNING IN 1976001
  WILL HAVE THE VALUES 000000076 000000077 000000078 000000079 0000000080
  IS THIS CORRECT? (Y OR N)
```



Example of POSTDATA (continued)

```
ENTER YOUR LOGICAL GROUP AND FREQUENCY (OR STOP)
EECH
ENTER THE VARIABLE NAME IN EECA
TRUFFLES
ENTER THE INITIAL FERIOD (E.G. 1955001)
1955001
ENTER THE DECIMAL PLACES
YOU MAY ENTER UP TO 5 DATA VALUES BEGINNING WITH THAT FOR 1955001.
ENTER VALUE FOR DATA FIELD 1
415
THIS VALUE WILL BE 4.15
ENTER VALUE FOR DATA FIELD 2
THIS VALUE WILL BE - 9999.96
ENTER VALUE FOR DATA FIELD 3
THIS VALUE WILL BE - 9999.97
ENTER VALUE FOR DATA FIELD 4
THIS VALUE WILL BE - 9999.99
ENTER WALUE FOR DATA FIELD 5
NDM
YOUR UPDATE OF TRUFFLES IN EECA BEGINNING IN 1955001
WILL HAVE THE VALUES 000000415 - 999996 - 999997 - 999999
IS THIS CORRECT? (Y OR N)
ENTER YOUR LOGICAL GROUP AND FREQUENCY (OR STOP)
ENTER THE VARIABLE NAME IN EECA
TRUFFLES
ENTER THE INITIAL FERIOD (E.G. 1955001)
1976991
ENTER THE DECIMAL PLACES
YOU MAY ENTER UP TO 5 DATA VALUES BEGINNING WITH THAT FOR 1976001.
ENTER VALUE FOR DATA FIELD 1
415
THIS VALUE WILL BE 415.
ENTER VALUE FOR DATA FIELD 2
NOMORE
YOUR UPDATE OF TRUFFLES IN EECA BEGINNING IN 1976001
WILL HAVE THE VALUES 000000415
IS THIS CORRECT? (Y OR N)
ENTER YOUR LOGICAL GROUP AND FREQUENCY (OR STOP)
STOP
JOB ERSSWHP(JOB02992) SUBMITTED
```

** FREE ALL FILES



SPKBATCH

DESCRIPTION:

The SPKBATCH (SPEAKEZ Batch job) routine will submit a data set of SPEAKEZ commands for batch execution without you having to prepare the necessary JCL. You may create a set of commands or change an existing set using the TSO Editor.

If this is a new set of SPEAKEZ commands, they will not be saved unless you enter SAVE XXX. Then the file will have the user's system prefix and the suffix of DATA. (e.g. ERSNN. XXX.DATA) You finish this editing with a STOP. If the SPEAKEZ commands are not to be saved, then you do not need to worry about the accummulation of unwanted data sets. If this is an old data set of SPEAKEZ commands, then any changes made will be executed but not saved unless you enter SAVE. (XXX is not necessary in this case).

If you are using a MYKEEP file with a nonstandard name, the routine will ask for the name of this file. You must enter its complete name including prefix and suffix. (e.g. ERS45. ER3WH.SPEAKEZ.MYKEEP.DATA) Next, the routine will ask for the library name (or DDNAME for those who understand JCL). This should be 8 characters of the user's choosing, consistent with the preceeding SPEAKEZ commands. (e.g. GET MYPROG ON DDNAME) However if you enter MYKEEP, you will be replacing the standard file with your file name as the default (e.g. GET MYPROG ON MYKEEP). Therefore you will not be using a mykeep file with the standard name (e.g. ERS45.SPEAKEZ.MYKEEP.DATA). In any case when asked if you are using a mykeep file with a standard name, only say YES if one currently exists. Finally the routine will ask if you are using a checkpoint file. If so, the routine requests the name of this file, which must already exist. (e.g. CHKPOINT, not ERSNN.CHKPOINT.SPEKSAVE).



Example of SPKBATCH

```
WELCOME TO THE EZFED SYSTEM.
 F.A.S. PSD DATA OBTAINED HEFE IS NOT FOR RELEASE
 UNLESS CLEARED BY F.A.S. COMMODITY DIVISIONS.
 ENTER ROUTINE CODE (QUIT OR HELP)
 SPKERTOH
 THIS IS A SPEAKEZ BATCH RUM.
 IO YOU ALREADY HAVE A FILE OF SPEAKEZ COMMANDS? (Y OR N)
 ENTER THE NAME OF THIS FILE (ERS68 IS ASSUMED).
 ECLYSTOK, TRENOS, ORTA
 ENTER THE JOHNAME
 ERESTER BUD
 SITER YOUR 10 DIGIT ACCOUNT NUMBER
8180456769
 EXTER THE MUMBER OF COPIES DESIRED
 ENTER THE REMOTE TERMINAL (RMT13 FOR ESCS OR RMT3 FOR FAS)
 SMTZ9
 IS THE OUTPUT TO BE ON KERCK? (Y OR N)
WHAT IS YOUR PRIORITY?
 O FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
WHAT IS THE JOB CLASS? (USUALLY C)
   JOBNAME=ER3WD ACCOUNT=0123456789 COPIES=1
   ROUTE=RMT79 FORM=1431 PRIORITY=1 CLASS=C
IS THIS CORRECT? (Y OR N)
ENTER THE SPEAKEZ COMMANIS AND EDIT THEM WITH TSO EDITOR. CHANGES WILL NOT BE MADE TO THE ORIGINAL FILE UNLESS YOU
SAVE THEM. SEND 'STOP' WHEN YOU ARE FINISHED.
EDIT
00010 SIZE=50
00020 RESTORE RATIOS
00000 YEAR=INTS(1 19)
20040 FOR I=1,11
68650 OLSQ ARGUMENT(ECSLANUM(I)) C YEAR: ALL
68860 OLSQ ARGUMENT(ECFRONUM(I)) C YEAR: ALL
68870 OLSQ ARGUMENT(ECFROSLA(I)) C YEAR: ALL
000000 END I
00090 FOR I=9,11
00100 (LSQ ARGUMENT(ECEUPRO(I)) C YEAR: ALL
00110 CLSQ ARGUMENT(ECTOTSLA(I)) C YEAR: ALL
60120 OLSO ARGUMENT (ECCATNUM(I)) C YEAR: ALL
00130 END I
66149 QUIT
END OF DATA
EDIT
STOP
ARE YOU USING A MYKEEP FILE WITH A NONSTANIARD HAME? (Y OR N)
ARE YOU USING A MYKEEP FILE WITH A STANDARD NAME? (Y OR M)
WILL YOU BE USING A CHECKPOINT FILE? (Y OR N)
ENTER ONE NAME ONLY
RATIOS
ERSEB. RATIOS. SPEKSAWE MUST ALREADY EXIST.
DB ERSHD(JOB00042) SUBMITTED ** FREE ALL FILES
ENTER POUTINE CODE (QUIT OR HELP)
DUIT
THANK YOU FOR USING EZPSD
READY
```



Example of SPKBATCH

```
ENTER ROUTINE COIE (OR GUIT OR HELP)
SEKE
THIS IS A SPEAKED DATCH RUM.
DO YOU ALREADY HAVE A FILE OF SPEAKEZ COMMANDS? (Y OR N)
ENTER THE NAME OF THIS FILE (ERSET IS ASSUMED).
YUGO.GRAINS.IATA
ENTER, THE JOEMANE
ERSPIU
ENTER YOUR 18 DIGIT ACCOUNT NUMBER
ENTER THE NUMBER OF COPIES DESIFED
ENTER THE REMOTE TERMINAL (AMT13 FOR ESCS OR AMT3 FOR FAS)
IS THE OUTPUT TO BE ON NEROX? (Y OR M)
WHAT IS YOUR PRIORITY?
(1 FOR WEEKEND, 3 FOR AVERAGE, AND 13 FOR ASAP)
WHAT IS THE JOB CLASS? (USUALLY C)
  LOBNAME=ERGPIU ACCOUNT=2911027106 COFIES=1
  ROUTE=RMT13 FORM=1431 PRICRITY=1 CLASS=C
IS THIS CORFECT? (Y OR M)
ENTER THE SPEAKEZ COMMANDS AND EDIT THEM WITH ISO EDITOR. CHANGES WILL NOT BE MADE TO THE OPIGINAL FILE UNLESS YOU SAVE THEM. SEND 'STOP' WHEN YOU ARE FINISHED.
EDIT
00001 SIZE=30
00002 GET YUGOSLAU
00003 EXECUTE YUGOSLAV
00004 GUIT
END OF DATA
EDIT
RENUM
EDIT
C 30 /EXECUTE //
EDIT
00010 SIZE=30
00020 GET YUGOSLAU
00030 YUGUSLAV
00040 QUIT
END OF INTA
EDIT
STOP
ARE YOU USING A MYKEEP FILE WITH A MONSTANDARD NAME? (Y OR M)
ENTER THE FILE NAME, FULLY QUALIFIED WITH FREFIX AND SUFFIX ERS67.ERS116.SPEAKEI.MYKEEP.DATA
ENTER THE LIBRARY (OR DD) NAME (LESS THAN 8 CHARACTERS)
MYKEEP
ARE YOU USING A MYKEEP FILE WITH A STANDARD NAME? (Y OR M)
WILL YOU BE USING A CHECKFOINT FILE? (Y CR N)
UOB ERSPIU(UOB08091) SUBMITTED 🤲 FREE ALL FILES 🦇
```

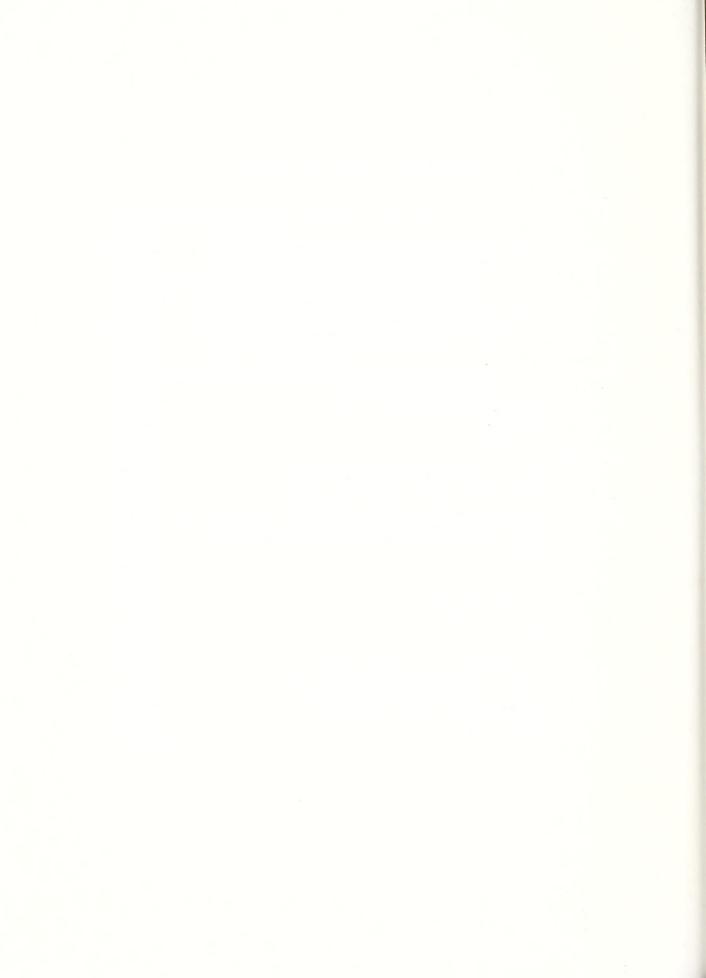


APPENDIX AT THE SOUNCE LISTING UP THE TOAM PROCEDURE

```
18
                                                                                 00000020
14
                                                          MAPCH 7, 1978
THE TOAM PROCEDURE WAS ARITTEN BY WALTER HOUSER, FOCHDOPA.

IT ALLOWS THE USER TO UPDATE THAM DOCUMENTATION AND DATA USING

ATCH PROGRAMS AND PROCEDURES DESCRISED IN THE TOAM STREET.
                                                                                *100000530
                                                                               *00000000
                                                                               *00000050
    BATCH PROGRAMS AND PROCEDURES DESCRIBED IN THE TOAM SYSTEM
                                                                                *00000040
JO DUCUMENTATION BY ROBERT L. OTTO. THE PROCDEUME EXECUTES SPEAKEZ IN FOR THE TOAM VARIABLE DUCUMENTATION AND OBCARD FOR THE DATA.
                                                                                *00000070
                                                                                ********
TABULAR LISTINGS ARE GENERATED USING TREABILIAN AND THAMSTAN.
                                                                                *100000090
   DOCUMENTATION LISTING IS GENERATED USING TOAMSDIR AND TOAMSXEN,
1.
    ONE OF THE ROUTINES IN THIS PHOCEOURE EVABLES THE USER TO SUBMIT SPEAKEZ CUMMANOS FOR MATCH EXECUTION. DETAILS ON THE VARIOUS ROUTINES ARE FOUND IN THE MELP PARAGRAPHS AT THE TOP UP THE
                                                                                *00000100
                                                                                ********
10
                                                                                *00000120
14
                                                                                *00000130
    PROCEUURE.
                                                                                *00000140
                                                HALTER HOUSER 3/7/79
                                                                                *^00000150
          */000001A0
     CONTROL END(ENDO) MSG MAIN
                                                                                 10000170
     HAITE MELCOME TO TOAM IN THE RATCH MODE.
                                                                                .00000180
     SET &ZERUFLD FG &STR(000000000)
                                                                                 00000199
     SET STOPECLOCED
                                                                                 00000200
     SET STUTPELSONUOL
                                                                               00000010
     SET STOLP#1979011
                                                                                 00000550
     SET EMLANAFLU EG ESTRE
                                                                                 00000230
STANTS HRITE
                                                                                 00000240
     WRITE ENTER THE ROUTINE COUR (CR GUIT OR HELP).
                                                                                 0250000
     READ
                                                                                 00000240
     IF ASTRIBSYSOVAL) NE ASTRI) THEN READDIVAL STASK
     58804 OD
                                                                                 00000286
       ARTIE BATCH TOAM PROCEDURE ERROR. PLEASE SAVE YOUR OUTPUT AND
                                                                                 00000540
       HRITE CONTACT WALT MOUSEN AT 176809.
                                                                                 00000300
       HUITE LASTCOMBLASTCO MAYCOMAPAXCO SYSPOMDERSYSPOND SYSSCHOR+
                                                                                 00000310
         45785C40
                                                                                 00000320
       SET SCUMMYIS
                                                                                 20000330
       RETURN
                                                                                 00000340
       £ * 60
                                                                                 00000350
     ATIN DO
                                                                                 00000360
       IF KSYSPOMD EG FOIT THEN END
                                                                                 00000370
       APITE ATTENTION BREAK
                                                                                 10001380
       ATTN
                                                                                 00000390
       SET BOUNMYIE
                                                                                 00000000
       GOTO START
       £400
                                                                                20000420
    IF ATASK FO SPRHATCH THEN SET STASK ED SPRH
ELSE IF STASK ED POSTDATA THEN SET STASK ED TOATA
                                                                                00000436
    ELSE TE STASK ED CHOUNC THEN SET STASK EQ COUC
                                                                                000000450
    ELSE IF STASK EQ LIST THEN BET STASK FO TAB
                                                                               1 00000460
    ELSE IF STASK ED DELETE THEN SET STASK ED DEL
                                                                                00000470
    ELSE IF STARK HE DOC AND .
                                                                                000004#0
       STARK NE TOATA AND .
                                                                                00000490
       STASK NE DEL AND .
                                                                                00000500
```



APPENDIX AT THE SOURCE LISTING OF THE TOAM PROCEDURE

```
STASH NE CHEATE AND . STASH NE CUPY AND .
                                                                                          00000510
                                                                                          00000520
        STASK NE SPKB AND .
        STASK NE DIR AND .
                                                                                          00000540
        STASH HE TAR AND .
                                                                                          00000550
        STASE NE GUIT AND .
        STASK WE HELP THEN DO
                                                                                          06000570
        GOTO START
                                                                                          00000580
        ENDO
                                                                                          00000590
     GOTO RTASK
                                                                                          00000600
HELPS -HITE THE FULLOWING APP VALID CODES(AND ALTASES) !
                                                                                          00000610
     ARITE SPARATCH (SPAH), CHOOOL, UOC, LIST (TAB), POSTUATA (TDATA), COPY, +
      CREATE, DIH, DELETE (DEL)

**PITE ENTEH THE ROUTINE NAME FOR FURTHER INFORMATION. ENTER STAFT 00000540
**PITE TO PETURN TO FXECUTION MODE.

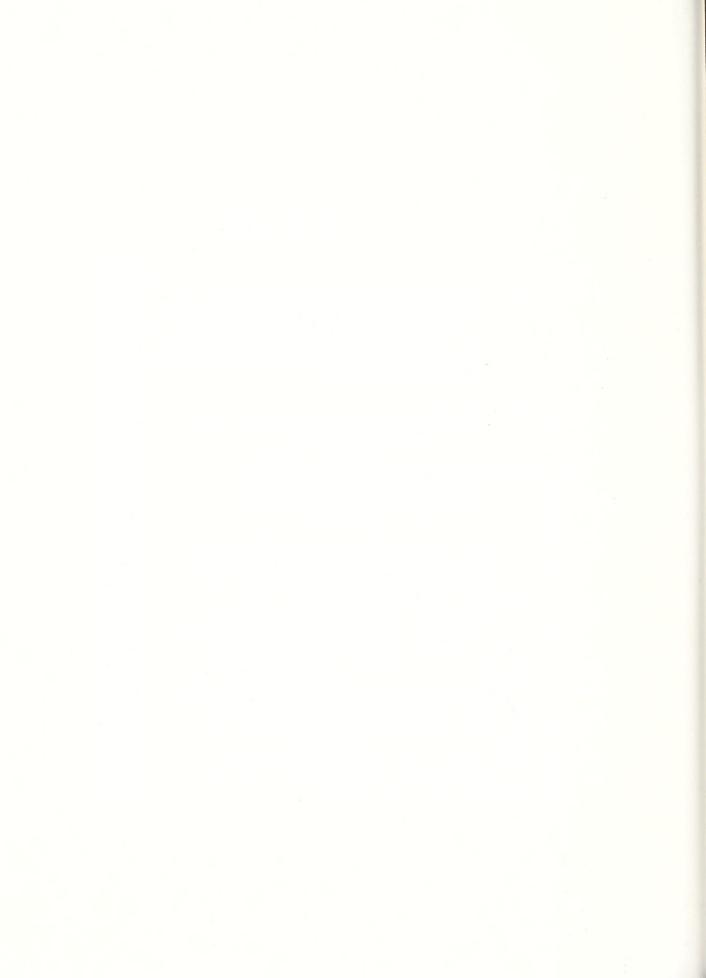
**ONON-50
      READ SHELPHAME
                                                                                          00000060
      IF SHELPHAME ED START THEN GOTO START
                                                                                          00000670
      IF SHELPHAME EU CREATE THEY LO HOLTE CHEATE WITH THE
                                                                                          00000680
                                                                                          00000590
      FPITE
                         DOCUMENTATION YOU PROVIDE IT CASSUMING YOUR
                        DDNE IN A BATCH JOB. YOU MNOULD GRUIP YOUR CHGDOC, OCOUNTSO COPPY, CREATE AND DELETE ROUTINES TOGETHER.
      STIFE
      STIPE
      STIP=
      ARITE
      PO#3
                                                                                          00000750
      IF RHELPHAME EQ TOATA OR AMPLPHAME EQ POSTDATA THEN DO
      APITE POSTUATA BATCH EXECUTION OF DATA UPDATES TO THE TOAM
                                                                                          00000770
      AWITE
                         DATA BASE. THIS ROUTINE USES ONCARDY.
                                                                                          00000780
      MEITE
                         TDATA IS A VALID ALIAS.
      STIPE
      £400
      IF EMELPHAME EQ DEL OR EMELPHAME EG DELETE THEN DO
                                                                                          000000820
      APITE DELETE WILL DELFTE TOAM VARIABLES IN A BATCH JOB.
                         TEL IS A VALID ALIAS. YOU SHOULD GROUP YOUR CMGDUC, nononeup
COPY, CREATE AND DELETE ROUTINES TOGETHER. nonober
      STIPE
      APITE
      PITE
                                                                                           00000660
      ENDO
      IF EMPLONANT ER COPY THEN UP
                        WILL CREATE ON REPLACE A NEW VAHAIBLE WITH THE DATA DUNDROGO
AND DOCUMENTATION OF AN OLD VARIABLE, DOCUMENTATIONOGOOGO
CAN HE CHANGED BUT THE DATA CANNOT, (SEE POSTDATA,) DOCUMENTO
YOU SHOULD GEOUP YOUR CHEDOC, CUPY, CREATE AND 00000920
      HITE COPY
      BILD
      MAITE
      BILLE
      APITE
                         DELETE HOUTINES TUGETHER FOR EFFICIENT PROCESSING. 00000930
      HAITE
      ENDO
                                                                                           00000950
      IF EHELPHAME EG DOC DR RHELPHAME EG CHGOOC THEN DO
                         BATCH EXECUTION OF DOCUMENTATION UPDATES TO THE 00000970 TOAM DATA BASE. YOU SHOULD GROUP YOUR CHECK, COPY, 00000980
      SUGDED STIME
      MPITE
                         STIFA
                         PROCESSING.
      APITE
                                                                                          00001000
```



APPENDIX AS TER SOURCE LISTING OF THE TOAM PRUCEDURE

```
≈#ITE
                                                                                               00001010
      ENUO
                                                                                                05010000
      IF BHELPHAME EU TAH OR RHFLPMAME EG LIST THEN DO HPITE LIST - BATCH LISTING OF TRAM DATA FOR A SPECIFIED TOAM
                                                                                                00001030
                                                                                                00001040
                          LOGICAL GHO P AND FREQUENCY. YOU MUST ALLOW FOR
      STIRE
                                                                                                00001050
      AHITE
                          BATCH EXECUTION OF ANY CHANGES BEFORE EXPECTING
                                                                                                00001060
                          THEM TO APPEAR IN A TOAM LIST ON TAB HIN.
YOU MAY LIST TOAM DATA ON A VARIABLE BY VARIABLE
      ARITE
                                                                                                00001070
      MUITE
                          BASIS, AMICH IS CONSIDERABLY CHEAPER THAN REQUESTINGOODIDGO.
       ARITE
       APITE
                           AN ENTINE LIGICAL GHOUP.
                                                                                               00001100
                           TAR IS A VALTO ALIAS.
       PHITE
       APITE
                                                                                               00001120
      EMD 0
                                                                                               00004130
      IF SHELPNAME EQ OIR THEN PO
       APITE DIN
                          BATCH LISTING OF THE DOCUMENTATION OF A TOAM
                                                                                                00001150
                          LOGICAL GROUP AND PREQUENCY.
       BIIDA
                                                                                                00001140
       APITE.
                                                                                                00001170
      E 1100
                                                                                                00001100
      IF RHFLPNAME EQ SPRH ON BHELPNAME EQ SPRESTON THEN DU HITE SPRHATCH BATCH EXECUTION OF SPEAREZ/FEDFASY, APITE EXISTING COMMANDS MAY BE USED ON NEW
                                                                                                00001190
                                                                                                00001200
                                                                                                00001210
                           COMMANDS ENTERED USING THE TSO EDITOR.
       ARITE
                                                                                                00001220
       MAITE
                          SPER IS A VALID ALTAS.
                                                                                                00001230
       STIPE
                                                                                                00001500
                                                                                                00001250
      E 400
      GOTO HELP
                                                                                                C4570000
COPYL ARITE THIS ROUTINE IS FOR RATCH CUPYING OF TOAM VADIABLES.
ARITE IF THE DOCUMENTATION FIELD IS NOT 10 BE CHANGED, THEN
ARITE ENTER KEEP OR K. IF THE ENTRY FOR THE FIELD IS TO HE THE
ARITE SAME AS THAT FOR THE PREVIOUS UPDATED VARIABLES, THE
                                                                                                00001270
                                                                                                00001280
                                                                                                00001200
                                                                                                00001300
       MHITE ENTER DITTO OR D DR A CAMPIAGE RETURN.
                                                                                                66001310
       GOTO TOBCARD
                                                                                                00001320
CREATE: ARITE THIS MOUTINE IS FUR CREATING NEW IDAM VARIABLES.

ARITE IF THE DUCUMENTATION IS TO BE THE SAME AS THAT FOR THE ARITE PREVIOUS UPNATED VARIABLE, EVTER DITTO OR D OR A CARRIAGE
                                                                                                00001330
                                                                                                00001340
                                                                                                00001350
      AMITE AFTOMM. (YOU SHOULD NOT USE THE KEEP OF K OPTION.) GOTO JUNGAMO
                                                                                                00001340
                                                                                                00001370
DELL ANITE THIS POUTINE IS FOR MATCH DELETION OF TOAM VARIABLES.
                                                                                                00001384
       GOTO JOSCAHO
                                                                                                00001390
CDOC: ARITE THIS ROUTINE IS FOR MATCH UPDATES OF TOAM DOCUMENTATION.
                                                                                                00001400
       ARITE IF THE DUCUMENTATION FIELD IS NOT TO BE CHANGED. THE
                                                                                                00001410
       WRITE ENTER KEEP OF K. IF THE ENTRY FOR THE FIELD IS TO HE THE WRITE SAME AS IMAT FOR THE PHEVIOUS UPDATED VANIABLE, THEN
                                                                                                04001420
                                                                                                06001430
       ARITE ENTER DITTO ON D ON A CARRIAGE RETURN.
                                                                                                00001440
       GOTO JUHCAHO
                                                                                                00001450
TDATAL MRITE THIS POUTINE IS FOR BATCH UPDATES OF TOAM DATA
                                                                                                06001640
      GOTO JUREARD
TABL WRITE THIS ROUTINE PROVIDES A TABULAR LISTING OF TOAM DATA
                                                                                                00001480
       ARITE INDIVIOUALLY OR BY LUGICAL GROUP.
                                                                                                00001490
       GOTO JOSCARD
                                                                                                00001500
```



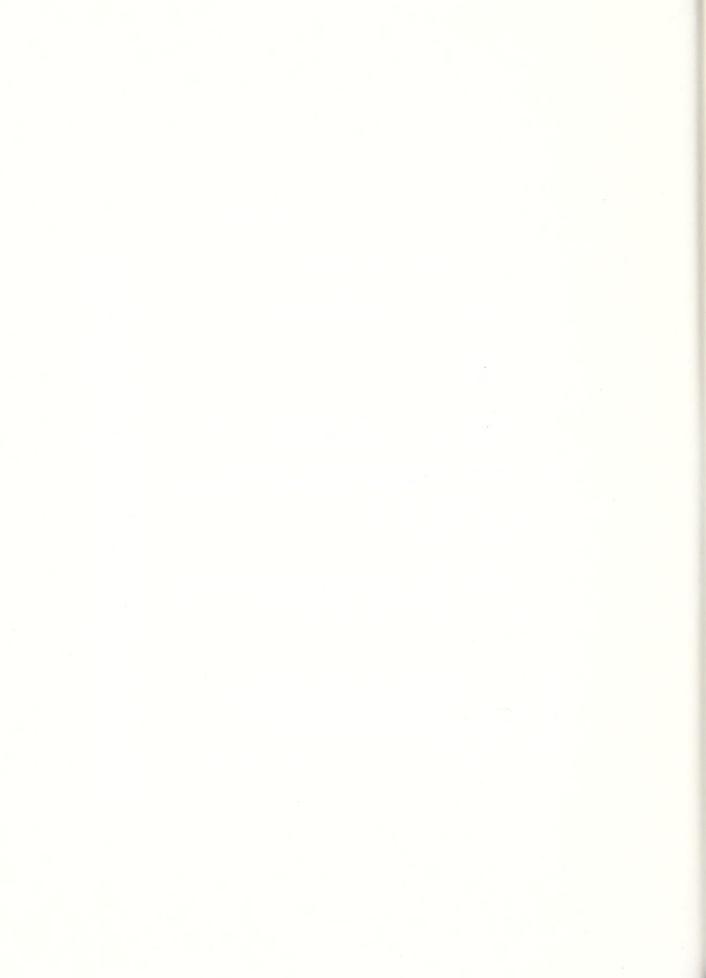
APPENDIX AT THE BOUNCE LISTING UP THE TOAM PROCEDURE

```
.DIRE ARITE THIS ROUTLAND PROVIDES A UTHECTORY OF TOAM DATA GROUPS.
                                                                               00001510
      UPP JUBLAND
                                                                               00001520
 SPENS WHITE THIS IS A SPEAKEZ HATCH RUL.
      SET SCHRETLE FU LSTR() .
                                                                               00001540
      HRITE OF YOU ALREADY HAVE A FILE OF SPEAKEZ COMMANDS? (Y OH N)
                                                                               00001550
      WEAD RANS
      IF BA'S EQ N OH BANS EQ NO THEN DO
                                                                               00001570
        SET BEUTINARASTR ("SYST. CLIST (NUMMY)" NATA)
                                                                               00001580
        MRITE IF YOU SAVE THESE SPEAKEZ COMMANUS WHILE IN THE 150 EDITOR 00001500
        MATTE (SAVE XXX), THEN ITS NAME ATLL HE STEPREF . AXX DATA
                                                                               00001500
        ENUP
                                                                               00001510
      LLSE PU
                                                                               05010000
        ARITE ENTER THE NAME OF THIS FILE (SSYSPREF IS ASSUMED)
                                                                               00001630
        READ SECTION
                                                                               00001640
                                                                               20001550
      GOTO JUBCARD
 JUBCARDS APITE ENTER THE JOHNAME
                                                                               00001670
      HEAD
                                                                               00001680
      IF ESTH(ESTBOVAL) WE ESTHI) THEN READDVAL BURBHAME
                                                                               00001690
       HRITE ENTER YOUR 10 DIGIT ACCOUNT NUMBER
                                                                               00001700
       READ
                                                                               00001710
       TE SSTR(ASYSDVAL) NE ASTR() THEN READOVAL BACCOUNT WRITE ENTER THE NUMBER OF COPIES DESIRED
                                                                               00001720
                                                                               00001730
       PEAD
                                                                               00001740
       IF STIRESYSOVAL) WE ASTRED THEN READDVAL ENCOPY
                                                                               00001750
       WHITE ENTER THE REMUTE TERMINAL (HMT13 FOR ESGS OR HMTS FOR FAS)
                                                                              00001760
       URAD
       IF ASTR(ESYSDYAL) NE ASTR() THEN HEADDVAL EHOUTE HRITE IS THE GUTPUT TO OF ON XEHOX? (Y OR N)
                                                                               00001750
                                                                               00001740
       READ
                                                                               00001800
       IF ESTP (RSYSOVAL) HE ESTH () THEN HEADDVAL EXERANS
                                                                               00001610
       IF LIERANSHYPS OR SAFRANSHY THEN ...
         Dυ
                                                                               00001831
           SET SPORMEXERD
            HAITE YOU MUST GIVE THE OPERATOR A REQUEST FORM FOR XEROX
                                                                               00001840
            ARTIE PROCESSING. PILASE ALLOW 3 DAYS.
                                                                               09001840
            SET ASYSOUTED
         E +00
     " ELSE OF
                                                                               00001090
            SET SPORME1431
                                                                               00001900
            IF BROUTEWANTS THEN SET BSYSOUTHE ELSE SET BSYSUUTHA
                                                                               00001910
         EVOO
                                                                               00001920
 PRIDRITY: SET SPANS EQ NO
    PHTY11 -HITE WHAT IS YOUR PRIORITY?
      APITE (1 FOR MEEKEND, 3 FOM AVERAGE, AND 13 FOR ASAP)
                                                                               00001950.
      HEAD
                                                                               00001740
      IF BSTH (BSYSDVAL) NE RSTH () THEN READDVAL BPHTY
                                                                               00001970
      HE EPRITY EU 13 AND EPANS FU NO THEN DO HRITE PRICHTLY 13 CHSTS THREE TIMES THAT OF PRICHTLY 3.
                                                                               000019#0
                                                                               00001990
        ARITE DO YOU WISH TO CHANGE PRIORITY? (Y OR N)
                                                                               00002000
```



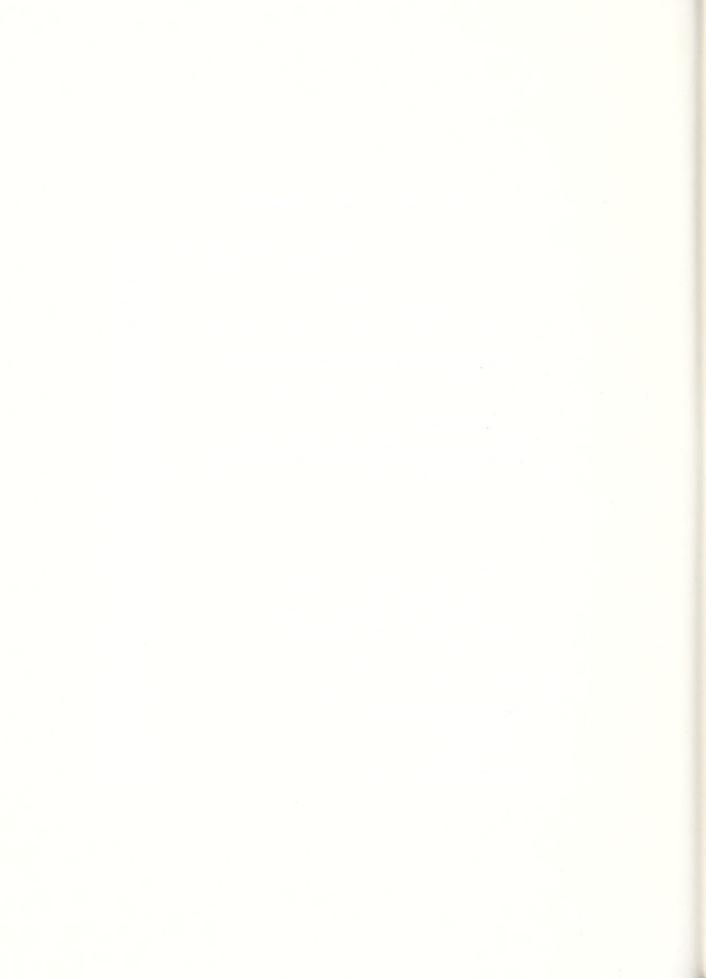
. APPENDIX AS TOO SQUINCE LISTING UP THE TOAM PROCEDURE

```
HEAD APANS
                                                                          00002010
     IF APANS EQ Y OR APANS EN YES THEN GOTO PRIVE
                                                                          00002020
     ENOU
                                                                          00002030
   ARITE AMAT 18 THE JOB CLASS? (USUALLY C)
                                                                          00002040
   HEAD
                                                                          00002050
   IF ASTH (ASYSDVAL) WE ASTROL THEN READOVAL ACLASS
                                                                          00002040
   IF SCLASSEC THEN DO
                                                                          00002070
    SET AMINUTESED
                                                                          00002000
    SET &SECOND8#20
                                                                          0002090
    DOP3
                                                                          00002100
   ELSE IF BCLASSED THEN OR
                                                                          00002110
    SET STINITESEZ
                                                                          00002120
    SET &SECONDS#0
    ENDU
                                                                          00002140
    ELSE 00
                                                                          00002150
    ARITE ENTER THE WIMBER OF MINUTES ALLOWED FOR CLASS SCLASS
     READ AMINUTES
                                                                          00002170
     ARITE ENTER THE WIMBER OF SECONDS PERMITTED
                                                                          00002180
     READ ASECONDS
                                                                          00002199
     ENUI
                                                                          00002200
   STIFE
           JOHNAMERAJUHNAME ACCOUNTRACCOUNT COPIESRACOPY
                                                                          01550000
   APITE
          ROUTE # # FORM # PRIORITY # $PETY CLASS # CLASS
                                                                          00002520
   STICE
                                                                          01520000
   WHITE IS THIS CORPECT? (Y CP N)
                                                                          00002200
   READ RANS
                                                                          00002250
   IF BAS ER N OR BASE EL NO THEN OR
                                                                          04559090
     HRITE PLEASE TRY AGAIN GOID JUHCARD
                                                                          07550000
                                                                          00002220
     ENDO
                                                                          00065500
IF STASK ED SPER THEN DO
   WHITE ENTER THE SPEAKEZ COMMANDS AND EDIT THEM WITH TSO EDITOR, WHITE CHANGES WILL NOT BE MADE TO THE OPIGINAL FILE UNLESS YOU.
                                                                          00002310
                                                                          00000330
   MHITE SAVE THEM. SEND STOP MHEN YOU ARE FINISHED.
                                                                          00002330
   EDIT KEDITUA
                                                                          00002340
   IF REPITOR ED LETR("BYST, CLIST(DUMMY)" DATA) THEN DEL 10
                                                                          00002350
   TERMIN STOP
                                                                          04650000
   UNNUM
                                                                          00002370
   y UFF
                                                                          00002340
   TOP
                                                                          00002300
   INSERT //RUNBNAME JOB (RACLOUNT., TSOOO, , , , &NCUPY.),
               "SPERATCH",
   INSERT //
                   MSGLEVELES, PRIVERPRIV., NOTIFYERSYSUID.,
   INSERT //
                                                                          00002420
                   TIME = (B TABLIES., ASECONDS.), CLASS = CLASS.
                                                                          00002430
   INSERT //
   INSERT / PROUTE PRINT GROUTE.
                                                                          00002440
   INSERT //STEPS EXEC ERSOASIS, PEGICN. DASIS=600K
                                                                          00002450
   INSERT //OASIS.SPEAKIN DO +
                                                                          00002460
   MOTTOM
                                                                          00002470
   HPITE ARE YOU USING A MYKEEP FILE HITH A MONSTANDARD MAME? (Y OF M) 00002480
   HEAD RANS
                                                                          0002490
   IF BANS EQ Y OR BANS EQ YES THEN DU
                                                                          00002500
```



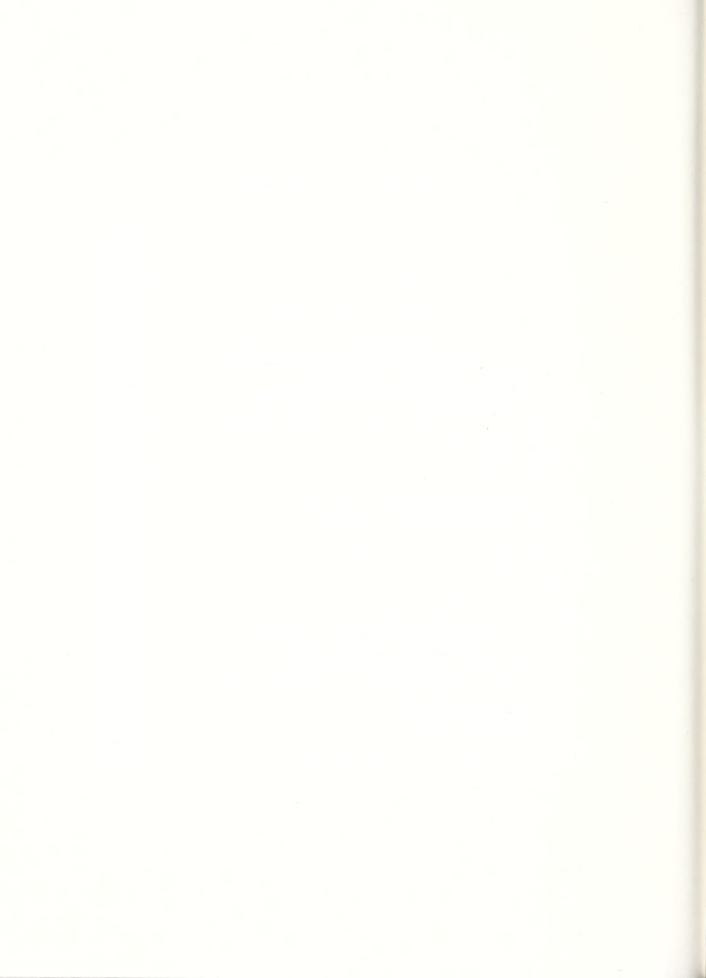
APPENDIX AS THE BOUNCE LISTING OF THE TOAM PRUCEPURE

```
HHITE ENTER THE FILE NAME, FULLY QUALIFIED WITH PREFLY AND SUFFIXODOUPSIO
                                                                            00002520
    READ AMYFILE
                                                                            000(2530
    HRITE ENTER THE LIBRARY (OH DO) NAME (LESS THAN 8 CHARACTERS)
                                                                            00002540
    HEAD BY YUD
                                                                            00002550
    INSERT //OASIS, RMYUD UP LSTREMYFILE.
                         918888HH
                                                                            00002560
    INSERT 11
                                                                            00002570
    ENIO
  MPITE ARE YOU USING A MYREEP FILE MITH A STANDARD NAMETLY OR ")
                                                                            00002540
  READ WASS
                                                                            00002000
  IF AANS EQ Y OR BANS FO YES THEN DO
    INSERT //MASIS.MYREED DO DSARESYSPREF..SPEAKEZ.MYREED.DATA.
                                                                            01650000
                                                                            00002520
     INSERT //
                                                                            00002630
    F *1.10
                                                                            00002640
  RRITE WILL YOU BE USING A LHECKPOINT FILE? (Y OR N)
                                                                            10062650
  READ KANS
                                                                             00002660
  IF KANS ED Y OR BANS EU YES THEN DO
                                                                             10102070
     APITE ELIER ONE NAME ONLY
                                                                             00002680
     READ ACHKEILE
     ARITE ESYSPHEF. . BCHKFILF. . SPEKSAVE MUST ALHEADY EYEST.
INSENT //OASIS. BCHKFILE. DD USNESYSPREF. . & CHKFILF. . & PEKSAVE,
                                                                            00002690
                                                                            10002704
                                                                             00002710
                      DISPESHH
     INSFAT //
                                                                             10102720
     ENDO
                                                                             00002730
  INSEET //
                                                                             00177100
   TOP
                                                                             00002750
  FIND M/7"
                                                                             00002740
   C . 4/7H/+MA
                                                                             10102770
   SUHMIT
                                                                             00002740
   END
                                                                             00002790
   ENUD
                                                                             00002500
OF STASK ER TAR THEN DO
   MRITE ON YOU WISH TO LIST BY GROUP OR VARIABLE? (G OR V)
                                                                             01856000
                                                                             00002820
   READ BANS
   IF ESHBETP(111, SANS) FO G THEY DO "
                                                                             00002430
     TAHOLI HRITE ENTER YOUR LOGICAL GROUP AND FREQUENCY
                                                                             00002840
     PFAD
     IF ESTH(ESYSOVAL) NF ESTH() THEN READOVAL ETDLGF
                                                                             00002560
     ARITE IS STOLEF CONRECT? (Y UR N)
                                                                             00002570
                                                                             001025A0
     HEAD BA'S
                                                                             00002090
     IF RANS EQ N OR GANS EG NO THEN DO HRITE PLEASE TRY AGAIN
                                                                             00002400
                                                                             00002910
        GOTO TABUT
                                                                             10002420
     ENDO
EDIT *ERSOD.LIBRARY.TDAM.USERS.CHTL(TABULARI)* CHTL
C 10 /JUBNAME/AJOSNAME/
                                                                             10102430
                                                                             00002940
                                                                             00002950
     C 10 MPHOJNOMBACCOUNTM
                                                                             00002960
     C 10 /COPTES/ENCUPY/
                                                                             00002970
     C SO NEWTORITANTEMIAN
                                                                             000029A0
     C 230 /LGFAPBRV/LTDLGF/
                                                                             00002990
     C 570 /LGFABORY/STULGF/
                                                                             00070900
     C 848 /FORM/SSTR(LSYSOUT.,, LFORM.)
```



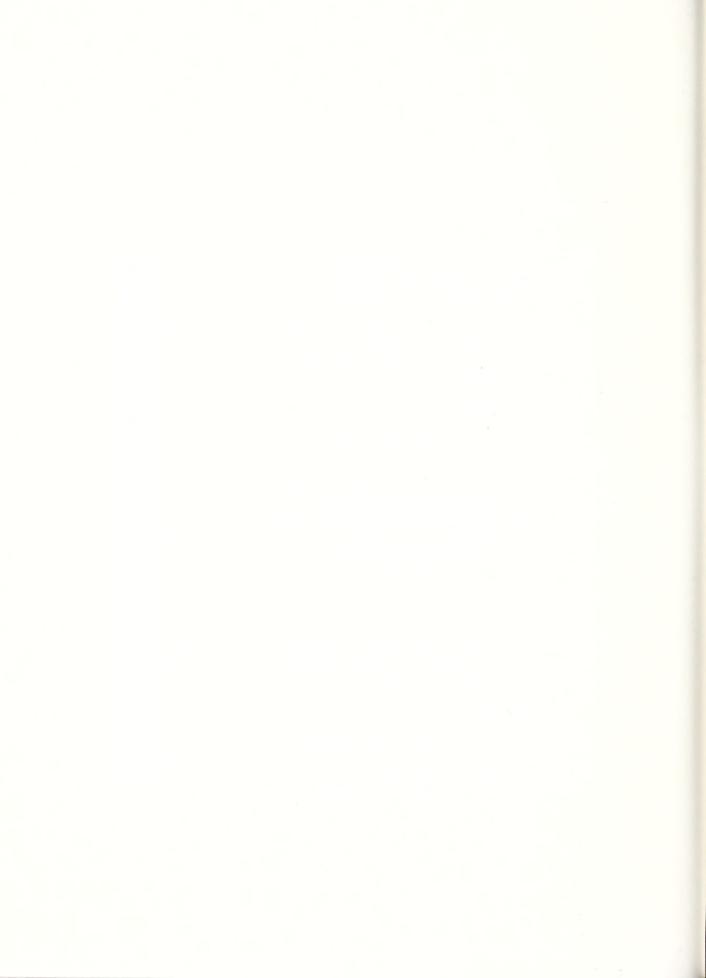
APPENUIX AS TSO SOURCE LISTING OF THE TOAM PROCEDURE

```
SHHHIT
                                                                             00003010
     ENO
                                                                             00003020
     FREFALL
                                                                             00003030
     GOTO START
                                                                             00003040
     ENDO
                                                                             0.0003050
  EDIT "8Y51.CLIST(DUMMY)" CNTL
                                                                             00003060
  TOP
                                                                             00003070
   INSERT //SJOHNAME JOB (RACCOUNT., T3000,,,,, ENCOPY.),
                                                                             00003090
  DEL 10
  HRAHA
                                                                             00003100
                   "IDAH TARULAR LIST",
#5GLEVEL#1,PRTY#XPPTY.,NOTIFY##5Y8UID.,
   IMSERT //
                                                                             00003110
   INSERT //
                                                                             00003120
   INSERT //
                   TIME (AMINHTES., ASECONOS.), CLASSECLASS.
                                                                             00003130
  INSERT /THOUTE PRINT BRUNTE.
                                                                             00003140
   INSERT //STEPO1 EXEC PGM#TPTABULR, REGION#334K
                                                                             00003150
   INSENT //STEPLIR DO USNEERS66.LIBRARY.LDAD,DISPESHR
                                                                             00003160
   INSERT //GU.FT05F001 DD +
                                                                             00003170
   HRITE ON YOU HANT THE USUAL PRINT OPTIONS (HISSING, ZRHOER)? (Y OR N) 00001180
   READ GANS
   IF BANS HE H AND BANS HE NO THEN DO
                                                                             00003200
     INSERT MISSING
                                                                             00003210
     INSFRT ZERUES
                                                                             00003220
     GOTO TAROPTE
                                                                             00003230
     E400
                                                                             00003240
   ELSE PO
                                                                             00003250
     ARITE SEE THAM HOCUMENTATION FUR OFFICES.
                                                                             00003240
     MPITE ENTER STOP MMEN YOU ARE FINISHED.
                                                                             00003270
   TABORTIE ARITE ENTER OPTION
                                                                             00003240
                                                                             09570000
     IF KOPT EQ STOP THEN GOTO TABOPTS
                                                                             00003300
     INSERT LOPT
                                                                             00003310
                                                                             00003520
     GOID TAROPTS
     ENDO
                                                                             00003330
   TABOPTE: INSERT STOP
                                                                             00003340
   INSERT VARIABLES 0334
                                                                             00003350
   INSERT /7
                                                                             00003340
   INSERT //GO.FT06F001 DD SYSOUTBA,
INSERT // DC8#(RECFM#FBA, LHFCL#133, ALKSTZE#1330n)
                                                                             00003370
                                                                             00003340
   INSERT //GO.FTO7FOOT DO SYSOUTEA,
                                                                             00003390
  INSELT // OCBE(RECEMERDA, LAFGLESS, ALKSIZEE) 3300) HRITE ENTER STUP OR NOHO WHEN YOU ARE FINISHED.
                                                                             00003400
                                                                             00003410
  INSERT //GO FTO1F001 DD CRMEERS78 TDAM STUBS DATA DISPESHR INSERT //GYSPRINT DD SYSUITEA
                                                                              00003420
                                                                              00003430
   INSERT //SYSOUT DO SYSOUTEA
                                                                              00003440
   INSERT //SYSOUD DD SYSOUTEA
                                                                             00003450
   INSERT //SYSOROUT DO SYSOUTHA
                                                                             00003460
   INSERT //SYSOTERM DO SYSUUTHA
                                                                             00003470
   INSERT //GO.CCIMPUTS DO .
                                                                             00003480
TABLE WHITE
                                                                             00003490
  HRITE ENTER LOGICAL GROUP AND FREQUENCY (OR STUP).
                                                                             00003500
```



APPENUIT AS ISO SCHACE LISTING OF THE TUAN PROCEDURE

```
. READ
                                                                                 00003510
   IF ASTH(ASYSOVAL) EQ NUMU UR ASTH(ASYSOVAL) EQ STUP + UP ASTH(ASYSOVAL) EQ QUIT THEN GUTO TAB?
                                                                                 00004520
                                                                                 00003530
   IF ASTRIBAYSUVAL) NE ASTRI) THEN READRIAL BYOLGE
                                                                                 00003540
   ARITE ENIER THE VARIABLE NAME IN STOLER
                                                                                 10003550
   HEAD
                                                                                 00003540
   IF ASTRIASYBOVAL) HE ASTRI) THEN SET ATOMAME EQ ASTRIABYSOVAL)
                                                                                 00003570
   BRITE
                                                                                 00003540
   ARITE THE VARIABLE NAME IS A REUNAME
                                                                                 00001590
   MPITE THE LOGICAL GROUP AND FREQUENCY 181 STOLER
                                                                                 00001600
   ARITE
                                                                                 00003610
   WRITE IS THIS COMPECT? (Y UR N)
                                                                                 05070700
   READ RANS
                                                                                 000000000
   IF HANS ED W OR SANS ED NO THEN DO
                                                                                 00001640
    AHITE PLEASE TRY AGAIN
                                                                                 00003650
     GOTO TANK
                                                                                 000035660
     ENDIT
                                                                                 00003070
   INSERT UPGET LEFENTOLEF KEYENTONAME TPHO LPHO
                                                                                 00003680
   GOTO TABL
                                                                                 00003590
STINA ISAAT
                                                                                 00003700
  INSFAT END
                                                                                 10103710
   INSERT 17
                                                                                 04003720
   INSERT // CONTA DO OSMERSOS OF COLCOATA ONLINE DATA,
INSERT // DISPESHE, OCHEOSOMORDA
INSERT // DISPESHE, OCHEOSOMORDA
INSERT // DISPESHE, OCHEOSORGEIS
                                                                                 00003730
                                                                                 00003740
                                                                                 00003750
                                                                                 00003760
   INSERT MAUNIT DO DUMMY
                                                                                 00003770
   INSERT //THIGGER DO USNEERSOO, LZ, THIGGER, DATA, INSERT // DISPESHE, DCREDSORGEIS
                                                                                 00003780
                                                                                 00003790
   INSFAT //
                                                                                 00061800
   100
                                                                                 00003810
   C . 9999 4/74/4MA
                                                                                 00003820
   SUBMIT
                                                                                 00003830
   END
                                                                                 00003840
   ENDO
                                                                                 00003550
IF STARA ED DIR THEN DU
                                                                                 00003560
   DINTE APITE ENTER THE LOGICAL GROUP FOR MHICH YOU MISM A DIRECTORY CONCENTO
   READ
                                                                                 00003880
   IF ASTH (ASYSOVAL) WE ASTR () THEN READDVAL ATOLOF
                                                                                 00001890
   MPITE IS ATOLGE CORRECT? (Y UH N)
                                                                                 00067900
   READ RANS
                                                                                 00003910
   IF KANS ED N OR BANS FR NO THEN DO
                                                                                 00003920
     AMITE PLEASE TRY AGAIN
                                                                                 00003930
     6010 0121
    E 400
                                                                                 00003950
   MRITE DO YOU WANT A COMPLETE ON BRIEF LIBTING OF THE + DOCHMENTATION? (C UP 9)
                                                                                 00001950
                                                                                 00003970
   READ BALS
                                                                                 00003980
   IF ASHBSTQ(111, SANS) EU C THEN DO
                                                                                 00003990
     EDIT "EHSOO.LIBRARY. TDAM. USFAS. CNTL (DIRECTRY) " CNTL
                                                                                 00004000
```



- APPENDIX AS TOO SOURCE LISTING OF THE TOAM PROCEDURE

```
C 10 /JOHNAME/&JURNAME./
                                                                        00004919
    C 10 /PROJNO/KACCOUNT./
    C 10 /COPIES/ENCOPY./
                                                                        00004030
    C 20 /PRICHITY/EPRTY./
                                                                        00004040
    C 190 /LGFARBRY/&TDLGF./
                                                                        00004050
    C 250 /SYSOUTHA/SYSOUTH(&SYSOUT.,,&FORM.)/
    SUBSTE
                                                                        00000070
    END
    ENDO
  ELSE DO
                                                                        00004100
    EDIT "ERSOO, LIBRARY, TOAM, HSERS, CATL (DIXOCC)" CATL
                                                                        00004110
    1.3HANHOLANSMENDONAME.
                                                                        00004120
    C 10 /PROJNO/BACCOUNT./
                                                                        00004130
    C 10 /COPIES/RNCOPY./
                                                                        00004140
    C 20 /PRICHITY/KPHTY./
                                                                        00000150
    C 190 /LGFARBRY/LTDLGF./
                                                                        00004160
     C 250 /SYSOUTHA/SYSOUTH(LRYSOUT.,, $500H.)/
                                                                        000004170
     SUBMIT
                                                                        nnnnalag
    END
                                                                        00000190
    ENDO
                                                                        00004200
  ENDO
                                                                        00100210
IF STASK EQ COOK OR STASK EQ COPY OR STASK EQ DEL +
                                                                        00004220
  UR STASH EG CREATE THEN DO
                                                                        00004230
  EDIT "SYST.CLIST(DUMMY) ! CATL
                                                                        00004240
   TOP
                                                                        00004250
   INSERT //EJOBNAME JOB (BACCOUNT., TS000, , , , &NCUPY.),
                                                                        0000#250
                                                                        00004270
  DEL 10
                                                                        00004240
  UNNUM
                 "THAM DOC HPDATE",
                                                                        00000290
   INSERT //
  INSERT //
                  MSGLEVELE1, PRIVERPRIV., NOTIFYERSYSUID.,
                                                                        00004300
                 TIME # (AMINHIFS., ASECONOS.), CLASS=6CLASS.
   INSERT / POLITE PRINT LOUITE.
                                                                        00004320
   INSERT //STEPS EXEC ERSOASIS, REGION, DASIS#600K
   INSERT //DASIS. SPEAKIN DO .
                                                                        00004340
   INSERT SITE =50
                                                                        000004350
   INSERT FCHU; INPUTCOL (RO); LOAD TOAM; LOAD TOPLEN
                                                                        00004340
   APITE ENTER YOUR TOAM SIGN-IN NAME AND PASSWORD (EROXX PASS)
   SEAD
                                                                        00004380
   IF ESTRIBSYSDUAL) NE ESTRI) THEN READDVAL STOSIGNI STOSIGNE
                                                                        00004390
   INSERT TOAM SIGNIN STOSIGNI STOSIGNE
                                                                        00004400
   INSERT TUFURMATE T4"; TODTSETUE"
                                                   ": 8P4CE (5)
                                                                        00004410
CONCIE #PITE
                                                                        00004420
   SET ENEWEXIST EO N
   IF STASK EN COMY THEN SET SINNOTE ER ESTRICLO )
                                                                        00004440
    ELSP SET SINNOTE EQ ASTR()
                                                                        00004450
   MHITE ENTER YOUR SINNOTE LUGICAL GROUP AND FREQUENCY
                                                                        000004460
   HEAD
   IF BSTH(BSYSOVAL) ER K THEN SET BSYSOVAL ER KEEP
   IF ASTR (ASYSOVAL) ER O THEN BET ASYSOVAL ER DITTO
                                                                        00004490
   IF ASTH (ASYSDVAL) HE ASTR() AND ASTR (ASYSOVAL) HE DITTO +
                                                                        00004500
```



APPENDIX AT TSO SOUNCE LISTING OF THE TOAM PROCEDURE

```
THEN HEADDVAL STOLER
                                                                             00004510
ARITE ENTER THE SINNUTE, VARIABLE MAME
                                                                             00004520
HEAD
                                                                             00000530
IF SSTR(SSTSUVAL) EQ K THEN BET 45780VAL EQ KFLP
                                                                             011004540
IF ESTA (ESYRUVAL) EO D'THEN SET ESYSUVAL EQ DITTO
IF $5TH(ESYROVAL) NE RSTH() AND ESTR(ESYSDYAL) NE DITTO THEN +
                                                                             000004560
   BET ATONAME FO ASTRIASYSTMAL)
IF STASK EU DEL THEN DU
                                                                             00004540
  MRITE
                                                                             00004590
  WRITE THE VAHIABLE TO BE DELETED IS A STONAME
  WRITE THE LOGICAL GRUIP AND FREQUENCY IS: STOLGF
                                                                             00000000
  PRITE
                                                                             00004620
  WRITE IS THIS CORPECT? (Y OR N)
                                                                             00000050
  READ RANS
                                                                             00000000
  IF AANS EO N OR BANS EU NO THEN DO HEITE PLEASE TRY AGAIN
                                                                             00004650
                                                                             00004660
    GOTO CUCCI
                                                                             00004570
    ENDO
                                                                             000046#0
  INSERT TONAMERERTONAMERITOLGFRESTDLGFR
  INSERT TUTPED; TOLPEN; TOAM (DEL TONAME)
                                                                             00004700
  SI30 DEL2
                                                                             00004710
  ENDO
                                                                             20204720
IF BIASK E- COPY THEN UN
                                                                             00000730
  ARITE ENTER THE NEW LOGICAL GROUP AND FREQUENCY
                                                                             09004750
  READ
  IF ASTRICASYSDVAL) EO K THEN SET BETROVAL EG REEP IF ASTRICASTSDVAL) EO D THEN SET ASYSDVAL EG DITTO
                                                                             000004760
  IF 43TP (ARYROVAL) NE RSTH () AND 68TP (RSVSOVAL) NE DITTO THEN +
                                                                             00004740
     SET RATOLUF ED ESTP(ESYSOVAL)
FLSE SET ENTOLGF ED ETALGF
                                                                             02004790
  ARITE ENTER THE NEW VARIABLE NAME
  READ
                                                                             00004620
  IF ESTRIBBYSUVAL) ED M THEN SET ESYRUVAL EG REEP IF ESTH (ASYSUVAL) ED D THEN SET ESYSUVAL EG DITTO
                                                                             000004430
                                                                             00004440
  IF ASTR(ESYSOVAL) HE RSTH() AND ESTP(ESYSOVAL) HE DITTO THEN +
                                                                             09004450
     RET RITDHAME EQ ESTRINSTSOVAL)
                                                                             000008550
                                                                             09004870
  ARTIE DOES THE NEW VARIABLE EXIST? (Y OR N)
  READ SHEWEXTST
                                                                             00004890
                                                                             00004900
  IF ANEHEXIST EQ NO THEN SET ANEMEXIST EQ N
  ENON
EESE no
  IF ATASK EG CREATE THEN UD
                                                                             00004930
    ARITE ENTER THE INITIAL PERTOD (E.G. STOIP)
                                                                             00004946
    READ
                                                                             00004950
    IF ASTR (ASYSOVAL) EQ # THEN BET ASYSOVAL EQ REEP.
                                                                             00000960
                                                                            00004970
    IF BSTH(ESYSOVAL) ED D THEN SET BSYSOVAL FG DITTO
IF BSTH(ESYSOVAL) NE BSTR() AND BSTR(BSYSOVAL) NE DITTO +
                                                                             00004940
                                                                             00004990
        THEN READDVAL STOIP
    HRITE ENTEN THE LAST PERIOD (E.G. STOLP)
                                                                             00005000
```



APPENUIX AT TSO SOURCE LISTING OF THE TOAM PRUCEDURE

```
READ
                                                                                      00005010
     IF BOTH(ESYSDUAL) EQ K THEN SET BEYSDUAL EQ KEEP
IF ROTH(ESYSDUAL) EQ D THEN SET BEYSDUAL EQ DITTO
                                                                                      00005020
                                                                                      00005030
     IF ROTH (BSYSOVAL) HE ROTH () AND BRID (RSYSOVAL) HE DITTO +
                                                                                      00005040
        THEN HEADLVAL STOLP
                                                                                      00005840
     ENDO
  ENDO
                                                                                      00005070
ARITE ENTER THE DECIMAL PLACES
                                                                                      000053#0
HEAD
                                                                                      00005090
IF $5TH(ASYSOVAL) EQ 4 THEN BET ESYSOVAL EQ REEP
                                                                                      00005100
IF BSTH(SSYSOVAL) EQ ? THE . SET BSYSOVAL EQ DITTO
                                                                                      00005110
IF ESTRIBETSDUAL) HE ESTRI) AND ESTRIBETSDUAL NE DITTO .
                                                                                      00005120
   THEN READOVAL STOOFCLUC
                                                                                      00005130
AMITE ENTER THE UNIT HE WEASURE
                                                                                      00005140
HEAD
                                                                                      00005150
IF RSTR(&STSDVAL) ER H THEN SET &STSDVAL ER HFLP
IF &STR(&STSDVAL) ER D THEN SET &STSDVAL ER DITTO
IF &STR(&STSDVAL) NE RSTH() AND &STR(&STSDVAL) NE DITTO THEN *
                                                                                      00005160
   SET RIPUNITS ED SSTR(ASYSOVAL)
ARITE ENTER THE CHARMS NAME
                                                                                      00005200
HEAD
                                                                                      0005210
IF ESTR(68YSDVAL) EQ X THEN SET ESYSDVAL EQ XEEP IF ESTH(68YSDVAL) EO O THEN SET 68YSDVAL EQ DITTU
                                                                                      03005220
IF ASTR (SSYSDVAL) WE ESTATE AND SSTR (ESYSDVAL) WE DITTO THEN +
                                                                                      00006240
   SET ATMSETHBY FO ASTRIASYSOVALT
                                                                                      00065550
ARITE ENTER THE DESCRIPTION
                                                                                      00004570
4FAD
IF BSYR(BSYSDVAL) EQ K THE- SET BSYSDVAL EQ KEEP
IF BSYR(BSYSDVAL) EQ D THE- SET BSYSDVAL EQ DITTU
                                                                                      00005280
                                                                                      00220000
IF ESTHINSYBUVAL) WE ASTHI) AND ASTRIBSYSDYALD NE DITTO THEN .
   SEY STODOCTHE FO ASTRIASYSDVAL)
                                                                                      00005310
ARITE ENTER THE CATA SOUNCE
                                                                                      00005320
= FAO
                                                                                      00005330
IF BSTR(SSYSUVAL) EQ K THEN SET BSYSOVAL EQ KEEP
IF BSTR(SSYSUVAL) EQ D THEN SET BSYSOVAL EQ DITTU
                                                                                      00005340
                                                                                      00005350
IF RSTH (ASYSOVAL) HE RSTR() AND ASTR (BSYSOVAL) HE DITTO THEN +
                                                                                      00005340
   SET ATTISOURCE EQ ASTR (ASYSDVAL)
                                                                                      00065570
PRITE
ARITE THE NEW DOCUMENTATION IS AS FOLLOWS: ARITE SINNUTE, LOGICAL GROUP AND FREQUENCY IS ... RIDLER
                                                                                      00005300
                                                                                      00065400
MRITE STANDIE, VARIANTE NAME IS ... BITNAME IF STANK ED CORY YHEN DO
                                                                                      05420000
  HRITE NEW LOGICAL GROUP AND FREQUENCY IS ... SATULGE HRITE MEN VAHIABLE MAME IS ... SATURAME
                                                                                      00005440
  приз
                                                                                      00005450
        UECIMAL PLACES ARE ... STODECLUC
UNIT OF MEASURE IS ... STOUNITS
ARITE
MAITE
                                                                                      00005470
SET ELUNITS ER SLENGTH (SSTH (STOUNITS))
IF BLINSTS GE' 17 THEN .
  ARITE UNIT OF MEASURE (ELUNITS CHARS) IS OVER 1A CHARACTERS. 00005500
```



APPENDIA AT THE SOUNCE LISTING OF THE TOAM PROCEDURE

```
MHITE UNNERS NAME IS ... STOSETURY
                                                                          20005510
SET &LSETHEY EQ &LENGTH (&SIR (&TUSETHBY))
                                                                          00105520
IF BUSETUMY GE 17 THEN + 00005530 ARITE UMNEH'S NAME (BUSETUBY CHARACTERS) IS UVER 15 CHARACTERS,0005540
       DESCRIPTION IS ... RTODOCINE
* BILD **
                                                                          00005550
SET BLOOK ED BLENGTH (ASTA (STODOCINF)) .
                                                                          00005560
IF $LO IC GE 86 THEY HAITE - DESCRIPTION ($LDOC CHARS) IS TOO LONG.01405570
WHITE DATA SOUNCE IS ... 4TDSOURCE
SET 6150K ED BLENGTH(BSTH(6TD8CURCE))
                                                                          00005580
                                                                          10105590
IF ALS IR GE BO THEN HRITE SOUNCE (BLSCR CHARS) IS TOO LONG.
                                                                          00004600 -
IF BIASK EU CREATE THEN DO
                                                                          00005610
  APITE
                                                                          00005620
          THIS IS A NEW VARIABLE WITH DATA INITIALIZED AT #999999, 00005630
  ARITE
  WRITE INITIAL PERTON IS ... STOIP
IF RUENGTH (RIDIP) NE 7 THEN +
                                                                          00005640
                                                                          10105650
   mulit.
              INITIAL PERSON NOT FUNAL TO 7 DIGITS.
                                                                          00005560
  ARITE LAST PERIOD IS ... STOLP:

IF RLENGTH (STOLP) NE 7 THEN +

HHITE LAST PERIOD NOT EQUAL TO 7 DIGITS.
                                                                          00005070
                                                                          00005560
                                                                          00005600
  ENUC
                                                                          00005700
-PITE
                                                                          06005710
                                                                          00005720
MMITE IS THIS CORRECT? (Y UR N)
HFAD RANS
                                                                          00005730
IF BAYS ED N OR BANS FU NO THEN GOTO CODE!
                                                                          00005740
INSERT TUNAMERMATONAMENTTOLIGER
                                                                          00005750
IF STORECLUC NE REER THEN INSERT TODECLOCHATDRECLOC
                                                                          00008760
IF STANK HE CREATE THEN DO
                                                                          00005770
  INSERT TUIPEDITOLPHOITDANDATARTOAM(GET TONAME)
                                                                          09675760
  INSERT TUIPETDIPETTOLPET(A PX
                                                                          09005790
  ENDO
                                                                          00005800
ELSE Po
                                                                          00005810
  INSENT TOTPESTDIPETPLPERTOLP
                                                                          00005820
  INSERT TUAMDATABARRAY (TOPLEN (TDIP, TDLP) 1) -999999/10+47DDECLOC
                                                                          00005630
  EMEN
                                                                          00005640
IF ASTH (STOUNITS) NE KEEP THEN INNERT TOUNITSERSTOUNITSE
                                                                          00005850
IF 45T-(6TUSETUBY) NE AFED THEN INSERT TOSETUBYERSTOSFTURYERS AST-(ATUDUCINE) HE AFED THEN DO
                                                                          00005840
                                                                          00005870
  IF ALCOC GE 40 THEN DO
                                                                          00005dAU
    SET STUDOCT EQ SSUBSTRITTAD, STODOCINE)
                                                                          00005890
    SET STOROCZ ER ASHIBTH (HITSEDIC, ATDROCINE)
                                                                          00005900
    INSERT TODUCINES*LIDOCIS
                                                                          00005910
    INSERT TODUCINERTOOCINEPETODOCZA
                                                                          00005920
    E 1.00
                                                                          00005430
  ELSE INSERT TODOCINFR*4TLOOCINF*
                                                                          00005940
                                                                          00005950
  ENDO
IF ASTH (ATDSOUNCE) HE REEP THEN DO
                                                                          00005960
  IF ELSUR GE NO THEN UP
                                                                          00005979
    SET STOSOR1 EN $SUBSTP(1140, STUBOURCE)
                                                                          00005980
    SET STUSURE ES SSUNSTREMITSLANK, STOSUURCE)
                                                                          00005990
    INSERT TOSOURCE ##ETOSORI#
                                                                          00006000
```



APPENDIX AT THE SOURCE LISTING OF THE TOAM PROCEDURE

```
INSERT TOSOUNCESTOSOURCESTOSONZE
                                                                             00006010
         FNDO
                                                                             00006020
       ELSE INSERT TOSOURCE#"&TOSUURCE#
                                                                             000004030
       ENDO
                                                                             00006040
COPYTE IF STASK FO COPY THEN DO
       INSERT TUNAMER RATURAMER, TOLGF # " LATOLGF "
                                                                            - 00006060
       IF ANFREXIST EG Y THEN +
                                                                              00004070
          INSERT TOAM (DEL TONAME)
     ENDO
                                                                             00006090
     ELSE IF STARK NE CREATE THEN .
                                                                              00006100
        INSERT TOAM (DEL TUNAME)
                                                                              00106110
     INSERT TOAM (ADD TOWARE TOAMDATA)
                                                                              00006120
DELZE -HITE ENTER ROUTINE COME (CHGDNC, CORY, CREATE, UFL) AR STOP-
                                                                             06140000
                                                                              00006140
     INSERT SPACE (5)
     HFAD
                                                                              00006160
     IF GSTH(GSYRUVAL) NE BSTH() THEN READOVAL GTASK
IF GTASK EU COPY OH RTASK EN CONC UR BTASK EN DEL +
                                                                              00006170
                                                                              OBIADOO
       ITR STASK EG CREATE THEN GOTO COOCT
                                                                              00006190
       ELSE DU
                                                                              000006200
       INSENT TOAM ENDINOECHOLOUIT
                                                                              01540000
                                                                              00006220
       INSERT //
                                                                              00004230
       TOP
                                                                              00004240
       FIND "/7"
                                                                              000004250
       C 4/74/44A
                                                                              DODUKEKO
       SUBMIT
                                                                              00004270
       END
                                                                              00006280
       ENDU
                                                                             00006290
     ENDO
                                                                              00006300
  IF STASK ED TOATA THEN DO
                                                                              00006310
     Enit "SYS1.CLIST(DUMMY)" CHTL
                                                                              00004320
     TOP
                                                                              0000A330
     INSERT //BJOHNAME JOH (RACCOUNT., TSOOO, , , , &NCOPY.),
                                                                              00006340
     DEL 10
                                                                              00006350
     ONNER
                                                                              00006360
                     PIDAM DATA UPDATE,,
MSGLEVELEI, PRIYERPRIY,, NOTIFYERSYSHIN,,
     INSERT //
                                                                              00006370
     INSERT //
                                                                              000006380
                    TIME # (& TINUTES., & SECONOS.), CLASS # & CLASS.
     INSERT //
                                                                              00006390
     INSERT / PRUNTE PRINT EROUTE.
     INSERT MATEROL EYEC PGMEDOCARDY
                                                                              00006410
     INSERT //STEPLIH DO DSHEEHSHO, LIBRARY, LOAD, DISPESHR
                                                                              000004420
     I'SERT //SYSUUT DO SYSOUTHA
                                                                              00006430
     INSERT //SYSULU DO SYSOLITAL
                                                                              00008440
     INSERT //8YSDROHT DO SYSOUTHA
                                                                              00006450
     INSERT //SYSOTERM OD SYSOUTHA
                                                                              00006460
     INSERT //CARDFIL DO .
                                                                              00006470
  OSAAOOOO (EEAQ XXPRE) DROREEAQ GMA BMAAM MISHBIE MADT BUDY RETEL BITIHH BYDIBTO
     HEAD
                                                                              00006490
     IF ASTRIBATIONAL) NE BATRI) THEN READDVAL ATDSIGNI ATDSIGNE
                                                                              00006500
```



APPENUTX AT THE SUMME LISTING OF THE TUA- PROCEDURE

```
00004510
   . IF KEFNGTH (BTDSTGN) NE 5 THEN DO
       RAITE STUN-TH NAME IS NOT EQUAL TO S CHARACTERS
                                                                          00004520
                                                                         00004530
       GUTO TUSIGN
       ENI O
                                                                          00006540
                                                                          00004550
     IF ATOSTGHE EQ ASTR() THEN DO
                                                                          00004560
       APITE OF SIGNAIN PASSHOLU GIVEN. PLEASE THY AGAIN.
                                                                          00004570
       GOTO TUSIGN
                                                                          000065#0
       ENITE
                                                                          00004590
     INSENT STOSTONS
                         $ 70316h2
                                          DATA ENTERED BY $575HID +
           ON SSYSDATE AT SSYSTEME
                                                                          00000000
     MRITE
                                                                          00006620
     MRITE ENTER REPEAT ON HER TO RESENTER A VALUE
                                                                          00004010
                 NOMORE ON NOM TO STOP BEFORE 5 VALUES
     MAITE
                 MISSING OF MIS FOR MISSING DATA (-999999)
                                                                          00006649
     ARITE
                 N/A FOR NOT AVAILABLE (-999996)
                                                                          00000650
     WRITE
                                                                          00000000
                 NEG FOR NEGLIGIALE (#999997)
     ARITE
     WRITE ENTER STUP OR NOMO HHEN YOU HAVE UPDATED ALL YOUR VARIABLES. ""ONOMBTO
                                                                          0.000000000
     ARITE
DATALL ARITE ENTER YOUR LUGICAL GROUP AND PREQUENCY (OF STOP)
                                                                          00004700
     READ
     IF ASTHIBSYSOVAL) ER STOP OR ASTRIBSYSOVAL) ER NOMO THEN GOTO DATAHOODATIO
                                                                          00004720
     IF KEFNGTH ( & SYSOVAL ) YE & AND -
       ESYSUVAL NE ESTR() AND RETRIASYSOVAL) NE MITTO THE DO
                                                                          00006710
       ARITE GROUP AND FREQUENCY NOT EQUAL TO 4 CHARACTERS.
                                                                          00006740
                                                                          00006750
       GOTO DATAL
                                                                          00006780
       EN. IT
     IF KSTR(&SYSUVAL) NE ASTR() AND &STR(RSYSDVAL) NE DITTO +
THEN HEADOVAL ETDLGF
                                                                          0000A770
                                                                          000067#0
                                                                       00004790
  TONAME
          ARITE ENTER THE VARIABLE NAME IN STOLER
                                                                          1000A800
     READ
     IF KLENGIM(ESYSDYAL) GT 20 AND + ESYSDYAL) NE DITTO THEN DO
                                                                          00004810
                                                                          1.0000kt20 .
       WHITE VANTABLE NAME LONGER THAN 20 CHARACTERS
                                                                          00000A830
                                                                          00006440
       GUTO TUNAM
                                                                          00004850
       ENOD
     IF ESTRIGRYSDUAL) WE ESTRIL AND ESTRIESYSDUAL) WE DITTO THEN +
                                                                          DASADODE
                                                                          00004670
        SET STOWARE EQ SSTR($5Y50YAL)
            WHITE ENTER THE INITIAL PERIOD (E.G. STOIP)
                                                                          DRHAGROOF
  TOPERD:
                                                                          00000000
     READ
     IF ELFHGTH (ASYSDVAL) HE 7 AND -
        ESYSDUAL NE ESTRO AND ESTROSTSUVAL) NE DITTO THEN DO
                                                                           010004910
                                                                           09006970
        MPITE INITIAL PERIOD NOT EQUAL TO 7 DIGITS
                                                                           09004410
        GOTO TUPERD
       € NO II
                                                                           00009440
     IF ESTRIBSYSDUAL) WE ESTRI) AND ESTPIRESYSDUAL NE DITTO +
                                                                           00006950
                                                                           04840400
         THEN READDVAL STOLP
                                                                           00006470
      MRITE ENIFE THE DECIPAL PLACES
                                                                           00004940
      READ
                                                                           09004990
      IF ASTRIASTSOVAL) WE ESTRI) AND ASTRIBSTSOVAL) NE DITTO +
                                                                           00007000
         THEN HEADOVAL STOUFCLUC
```



APPENDIX AS 130 SOURCE LISTING OF THE TOAM PROCEDURE

```
SET AIND EQ 1
                                                                                      00007010
      SFT NUM1 EQ ASTR()
                                                                                     00007020
      SFT MIMP FO &STR()
                                                                                     00007030
      SET NUMS EU ESTR()
                                                                                     00007040
      SET WIME EQ ESTRO
                                                                                     00007050
      SET WIME FO ASTRO
                                                                                     100007040
      SET BLAGHLARS ER 26 . BLENGTHIBTULGFATONAME)
                                                                                     00007070
      SET AREASKS EN REUNSTROLLAR SPENKE, ANDANKELD)
                                                                                     00007080
      SET ACARD ED STOLGFATONAMERALANKSATOLPESTO(...)
HRITE TOU MAY ENTER UP TO 5 DATA VALUES BEGINNING WITH THAT FOR +
                                                                                     00007090
                                                                                     00007100
         ATDIP. .
                                                                                     00007110
BATARE ARITE
                                                                                     00007120
      WHITE ENIER VALUE FOR DATA FIFED SIND
                                                                                     00007130
      00 PO-03
                                                                                     00007140
        ARITE INVALID ENTRY. PLEASE TRY AGAIN.
                                                                                     00007150
        GOTO DATAS
                                                                                     00067160
     £ =/11(1
                                                                                     20007170
     READ STRNIM
                                                                                     000071#0
     SFT SELIN EQ SLENGTH(SSTR(SINGHN))

IF SLIN LT 3 THEN
                                                                                     00007190
                                                                                     00007200
     ELSE IF SOUPSTR(113,65TR(EINNIM)) ED MIS THEN -
SET EINNIM ED ESTH(- 999499)
                                                                                     001570101
                                                                                     06067220
     ELSF IF SSURSTH(113, &STR(&INNIH)) EC NOW THEN .
     GUTU CATAS
ELSE IF ASUMSTR(1:3,4STP(&INNUM)) EQ NEG THEN .
                                                                                     00007230
                                                                                     00107240
         SET ELNNIN ER 45TH (- 990997)
     ELSE IF ASUBSTR(113, 55TP(EINTIM)) EG RETR(N/A) THEN O
                                                                                     00007240
                                                                                     00007270
     ELSF IF ASUASTR(113.6STP(#14NHM)) EO REP THEN DO
                                                                                     00007290
       SET STOD EU SIND . 1
                                                                                     00007300
        SOTO DATAS
                                                                                     00007310
       £ 14 D O
                                                                                     00067320
    SET BLIN FU BLENGTH (BSTR(BINAHM))

IF ALIN OT 9 THEN DO

ARITE VALUE IS GREATER THAN 9 SIGNIFICANT FIGURES, INCLUDING
                                                                                     00007330
                                                                                     00007340
                                                                                     00007350
       ARITE ATDRECTOR DECIMAL PLACES. PLEASE HE-ENTER.
                                                                                     00007340
       COTO DATA?
                                                                                     00007370
     ENUM
                                                                                     00007380
     ELSE BET ALNGZERO ER 9 - ALIN
                                                                                     00007390
     IF ALAGZERO GT O THEN -
                                                                                     00007400
     SET OF THIM ED REMATE (11 REMETERD, SZEROFEN) RETHINDING ELSE IF SUNGLERO ED O THEM SET ROUTHOM ED OSTRIKINNIM)
                                                                                     00007410
                                                                                     00007420
     IF ATROELLOW ED D THEY -
     MHITE THIS VALUE AILL BE ASTRIBINNUMIASTRI.)
ELSE IF BLIN GI ATDOLCLOC THEN .
                                                                                     00007440
                                                                                     00007456
       ARITE THIS VALUE -ILL HE AS HESTA (1: ALIN-ATODECLOC, ASTRICAINNUM)) + CONOTHAO
         ESTR(,) RSHBSTR(ELIN-ETUNECLOC+11RLIN, RSTR(EINNUM))
                                                                                    00007470
     ELSF IF GLIN EQ STODECLOC THEN .
                                                                                    00007480
       WHITE THIS VALUE FILL HE ASTRICO, ) ASTRIBITIONS
                                                                                    00007490
     ELSE MHITE THIS VALUE WILL HE SETRICO. 1+
                                                                                    00007500
```



APPENDIA AS TSO SOUNCE LISTING OF THE TOAM PRUCEDUPE

```
ASUASTR(1:6TDDECLOC+ALIN, CZEROFLD)4STR(RINNDM)
                                                                                  00007510
     SET NUMBING EQ BSTH (BOUTNES)
     SET ATED EG SEVAL(NIND + 1)
     IF 4140 LT & THEN GOTO DATAS
     FARUM TO
       HRITE BATCH TOAM PHOCEDING ERROR. PLEASE SAVE YOUR OUTPUT AND 00007560 GRITE CONTACT HALT MIUSES AT Y74509. 00007570
        ARITE LASTOCHELASTOC MAYLCHEMAXCO SYSPOMDHESYSPOND SYSSOMDH
                                                                                   00007590
          $$ ₹35 F PO
        SET STUMMY18
                                                                                   06007660
        RETHEN
                                                                                   00007610
        ENDO
                                                                                   00007630
DATAS: SET SCARD EG ASTHIBCARDAS MIRNUMERNUMS)
     ANTTE WOUND OPPOSTE OF RESTRICTIONAME) IN STOLER REGISHING IN KTOIP ANTE ATLL MAVE THE VALUES RIGHT SHUMS SHUMS THUMMENING
                                                                                   00007640
                                                                                   00107650
      ANITE IS THIS CORRECT? (Y ON N)
                                                                                   06007640
      S'AD AA'S
                                                                                   00007670
      IF BANS HE Y AND BANS OF BSTHE) AND BANS HE YES THEN DO
                                                                                   00007680
        HRITE PLEASE TRY AGAIN
                                                                                   00007690
                                                                                   06007700
        GOTO DATAL
        ENDO
                                                                                   00007710
      ELSE INSERT 6CARD
                                                                                   00007720
      GOTO PATAS
                                                                                   00007730
DATAUS APITE
                                                                                   00007740
                                                                                   0000-7750
      INSERT /7 "
      INSERT //DEDATA DD DSNEFRSEN, DZ, UTLCDATA, ONLINE, DATA,
INSERT // DISPESHE, DLHEDSCHGEDA
                                                                                   00007760
                                                                                   00007770
      INSERT //UZINDEX DO DSWEERSAN.DP. OILCINDX. UNLINE, DATA,
                                                                                   00007780
                                                                                   00007790
      INSERT //
                    OISPESHR, DCHEDSORGEIS
      ISERT MAUDIT DO DIMMY
      TUSENT //PASSHORD UN DSVEENRON. D. PASSHOHD. DATA,
                                                                                   00007810
                       DISPESHP, CC 4EDSOHGETS
                                                                                   00007820
      INSERT //
      INSERT //TRIGGER OD USMEERSHO.DZ.THIGGER,OATA,
INSERT // DISPESHR,DCHSDSONGEIS
                                                                                   00007830
                                                                                   00007840
                                                                                   00007850
      INSERT //
      TOP
                                                                                   00007840
                                                                                   06067870
      C * 9999 4/7M/*MA
                                                                                   00007886
      SUBMIT
                                                                                   00007890
      E . D
                                                                                   00007900
      E 500
      FPEEALL
                                                                                   00007920
      GOTO START
                                                                                   00007930
QUITS WHITE THANK YOU FOR USING TOAM IN THE BATCH MODE.
     £ 100
                                                                                   00007940
```





